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## ABSTRACT

As one step in the process of developing consensus on the definition of school readiness, the National Education Goals Panel requested a survey about the current beliefs and professional judgments of public school kindergarten teachers regarding school readiness. Conducted by the National Center for Education Statistics in the spring of 1993, the survey covered three general areas: (1) public school kindergarten teachers' judgments and beliefs about school readiness; (2) the characteristics of the teachers' kindergarten classes and their practices in these classes; and (3) the teachers' background characteristics. This document details the results of that survey. Of the over 1,300 kindergarten teachers surveyed, the great majority (96%) held the view that the most important factor, for kindergarten readiness is for the child to be physically healthy, rested and well nourished. A majority also believe that children should be able to communicate wants, needs, and thoughts verbally and that enthusiasm and curiosity are more important for school readiness than knowledge of the alphabet or counting ability. While most teachers believe that school readiness cannot be pushed, 94% also believe that they can enhance a child's readiness by providing helpful experiences; moreover, they are almost universally agreed that parents should read to their children and play counting games at home regularly to help children prepare for school. More than half of the document consists of tables of estimates and standard errors. Eight figures and five text tables are also included, and a copy of the survey is appended. (MM)

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September 1993

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# Public School Kindergarten Teachers' Views on Children's Readiness for School

Contractor Report



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Statistical Analysis Report

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## Public School Kindergarten Teachers' Views on Children's Readiness for School

Contractor Report



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U.S. Department of Education  
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September 1993

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## Highlights

- According to public school kindergarten teachers, the most important quality for kindergarten readiness is for a child to be physically healthy, rested, and well-nourished--96 percent indicate that this quality is very important or essential for school readiness (table 3). The majority of teachers also believe that children should be able to communicate needs, wants, and thoughts verbally (84 percent) and should be enthusiastic and curious in approaching new activities (76 percent).
- Most public school kindergarten teachers (88 percent) believe that readiness for school comes as children grow and mature and cannot, therefore, be pushed (table 5). However, 94 percent also believe that they can enhance a child's readiness by providing experiences children need to build important skills.
- Ninety-seven percent of public school kindergarten teachers agree that one of the best ways to help children learn to read is by reading to them (table 5).
- Teachers in 90 percent of public school kindergarten classes reported that their students listened to stories read aloud 5 days per week in the 1992-93 school year (table 11).
- Only 27 percent of public school kindergarten teachers assume that by the end of the kindergarten year all children will be ready for first grade, and 70 percent indicate that they would hesitate to send children to first grade if they felt the children were not ready for the demands that they would meet there (table 5). Furthermore, 85 percent of public school kindergarten teachers indicate that they communicate with the first grade teachers so that they can proceed from where the kindergarten teacher left off. Only 4 percent report that they do not communicate with the first grade teachers (derived from table 4).
- Fifty-four percent of public school kindergarten teachers teach full-day classes. Of those who teach half-day classes, 27 percent teach morning only, 11 percent teach afternoon only, and 62 percent teach both a morning and an afternoon kindergarten (figure 8).
- In the Nation's public school kindergartens, the student-to-staff ratio for spring 1993, including the teacher and paid assistants (based on full-time-equivalents), was 15 to 1 (table 8). The student-to-adult ratio, which includes volunteers and is also based on full-time-equivalents, was 14 to 1 (table 9).
- The Nation's public school kindergarten teachers average 9 years of kindergarten teaching experience (table 14). Fifty-four percent majored in early childhood education, and 29 percent hold memberships in professional associations for early childhood education.

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## Background

When the National Education Goals were set by the President and 50 state Governors in 1990, the first goal stated that "by the year 2000 all children in America will start school ready to learn." At present, there is no direct measure of school readiness, nor is there common agreement on the qualities of early learning and development that are critical for school readiness or on the activities that foster readiness. Although some qualities have been identified as important, no consensus has emerged on the degree of importance. For example, is it more important to know the letters of the alphabet and how to count or to have an enthusiastic and curious approach to learning? How should parents and teachers and schools help to develop readiness? Do teachers perceive "readiness" as a single attribute or a set of dimensions of early learning and development to be nurtured? The latter view may influence whether teachers think children should be enrolled in kindergarten even if they seem "unready."

As one step in the process of developing consensus on the definition of school readiness, the National Education Goals Panel requested a survey about the current beliefs and professional judgments of public school kindergarten teachers regarding school readiness. Conducted by the National Center for Education Statistics in spring 1993, the survey covered three general areas:

- Public school kindergarten teachers' judgments and beliefs about school readiness,
- The characteristics of their kindergarten classes and their practices in these classes, and
- Public school kindergarten teachers' background characteristics.

The portion of the survey used to measure teachers' beliefs about school readiness contained two major items: the first asked teachers to indicate agreement or disagreement with a number of statements regarding readiness, including items about how to facilitate learning, and the second asked teachers to rate the importance of various qualities for school readiness. These items were adapted from measures used by Stipek *et al.* (1992) and Milburn (1992) in their studies of preschools and parents of preschoolers in the Los Angeles area.

Teachers were asked to provide the following information on the characteristics of their classes and teaching practices: type of class (regular kindergarten, transitional kindergarten, transitional first grade, or ungraded or mixed-grade class with at least some kindergarten students), whether the class met full- or half-day, the number of hours of class per week, the racial/ethnic composition of the class, the age distribution of the class, and the amount of assistance the teachers received, either through paid assistants or adult volunteers. In addition, teachers were asked how often their classes participated in various types of activities.

Teachers were also asked to describe their background and characteristics including: race/ethnicity, teaching experience,

preparation in early childhood education, and membership in professional associations for early childhood education.

Because this study was exploratory in nature, the data were analyzed by numerous variables to see if responses varied by school or teacher characteristics. The following characteristics were used as independent variables:

#### **School characteristics**

- *School enrollment size*: less than 500 (small), 500 to 749 (medium), and 750 or more (large). This variable was obtained from the Common Core of Data (CCD) Universe of Public Schools.
- *School kindergarten enrollment*: less than 60, 60 to 99, 100 or more. This is the total number of kindergarten students in the school and was obtained from principals during collection of the lists of kindergarten teachers.
- *Kindergarten class size*: less than 20, 20 to 25, 26 or more. This variable was obtained from teachers in the survey.
- *Metropolitan status of school*: city, urban fringe, town, rural. This variable was obtained from the CCD Universe of Public Schools. Metropolitan status categories are defined in the survey methodology section of this report.
- *Region*: Northeast, Central, Southeast, West, based on the National Assessment for Educational Progress definitions of region. A list of states in each region appears in the survey methodology section of this report.
- *Percentage of students in the school eligible for free or reduced-price lunches*: less than 20 percent, 20 to 49 percent, and 50 percent or more. This variable, which was obtained from principals during list collection, is used as a proxy measure for poverty status with the categories indicating low, medium, and high poverty.
- *Percentage minority enrollment in class*: less than 10 percent (low), 10 to 49 percent (medium), and 50 percent or more (high). This variable was obtained from teachers in the survey.

#### **Teacher characteristics**

- *Years teaching kindergarten*: less than 5 years, 5 to 10 years, and 11 or more years. This variable was obtained from teachers in the survey.
- *Teaching assignment*: taught full-day class, taught two half-day classes (i.e., both morning and afternoon sessions in a school with half-day kindergartens), and taught one half-day class (i.e., either

morning session or afternoon session, but not both). This variable was obtained from teachers in the survey.

- *Major in early childhood education:* yes, no. This variable was obtained from teachers in the survey.
- *Member of early childhood education professional association:* yes, no. This variable was obtained from teachers in the survey.
- *Number of early childhood education courses taken in college or graduate school:* less than 5, 5 to 9, 10 or more. This variable was obtained from teachers in the survey.
- *Race/ethnicity:* white, non-Hispanic; Black, non-Hispanic; and all other races. This variable was obtained from teachers in the survey. The survey obtained information on all five racial/ethnic categories, but there were too few teachers in the other categories to report separately.

Data have been weighted to national estimates of public school kindergarten teachers (table 1). Items dealing with kindergarten classes and students were weighted to national estimates of public school kindergarten classes. All statements of comparison made in this report have been tested for statistical significance through chi-square tests or t-tests adjusted for multiple comparisons using the Bonferroni adjustment and are significant at the .05 level or better. However, not all statistically different comparisons have been presented, since some were not of substantive importance.

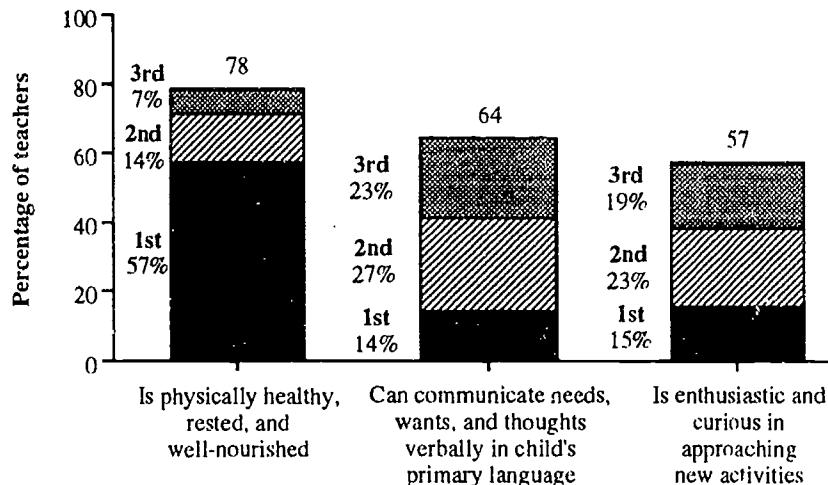
## **Teachers' Ratings Of Important Qualities For Kindergarten Readiness**

### **Most Important Qualities**

Teachers completing the survey were asked how important each of 15 stated qualities was for a child to be ready for kindergarten (table 2). After assigning a level of importance to each quality, teachers were asked to select the three qualities they felt were most essential for a child to be ready for kindergarten.

The top three qualities public school kindergarten teachers consider essential for school readiness are that a child be physically healthy, rested and well-nourished; be able to communicate needs, wants, and thoughts verbally; and be enthusiastic and curious in approaching new activities (figure 1).

**Figure 1.--Percentage of public school kindergarten teachers rating qualities as 1st, 2nd, and 3rd most important for a child to be ready for school: United States, 1993**



SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

These three qualities are the same qualities to which the highest proportion of teachers gave individual ratings of "very important" or "essential." According to teachers, the most important factor for kindergarten readiness is for a child to be physically healthy, rested, and well-nourished; 96 percent of public school kindergarten teachers rated this quality as very important or essential (tables 2 and 3). This was followed by an ability to communicate needs, wants, and thoughts verbally (84 percent) and enthusiasm and curiosity in approaching new activities (76 percent).

More than half the teachers also place significant importance on the ability to follow directions (60 percent), not being disruptive in class (60 percent), being sensitive to other children's feelings (58 percent) and the ability to take turns and share (56 percent). Of less importance are knowing English (42 percent), the ability to sit still and pay attention (42 percent), and finishing tasks (40 percent).

Of least importance according to kindergarten teachers are good problem-solving skills (24 percent), the ability to identify primary colors and basic shapes (24 percent), the ability to use pencils and paint brushes (21 percent), knowledge of the alphabet (10 percent), and the ability to count to 20 (7 percent).

## **Differences in Teachers' Ratings of Qualities, by School and Teacher Characteristics**

Differences in public school kindergarten teachers' perceptions of the importance of various qualities for school readiness were found by school poverty status, geographic region, minority enrollment, and the race/ethnicity of the teacher.

Teachers in schools with low levels of poverty are more concerned with a child's ability to take turns and share than teachers in schools with high levels of poverty (64 percent versus 52 percent; table 3). In classes with low minority enrollments, 84 percent of teachers consider enthusiasm and a curious approach to learning as very important or essential to school readiness, while fewer of their counterparts in classes with high (71 percent) and medium (73 percent) minority enrollments consider this characteristic very important or essential to kindergarten readiness.

Teachers' attitudes also differ somewhat by metropolitan status and region of the country in which they are teaching. In rural areas and in the Southeast region of the United States, about half (53 percent for each) of all kindergarten teachers consider knowledge of the English language to be necessary for a child to be ready for kindergarten. In other locales and in other regions of the country, knowledge of English is considered less important. Only 35 percent of teachers in urban fringe and 37 percent in city schools think knowledge of the English language is very important or essential. Thirty-eight percent of teachers in the Northeast and 31 percent in the West consider knowledge of English very important or essential.

The views expressed by teachers also differ by the race/ethnicity of the teachers. Black, non-Hispanic teachers are more likely than teachers of other racial/ethnic groups to place a higher value on a child's ability to count to 20 (23 percent compared with 6 percent for white, non-Hispanic teachers and 8 percent for teachers of other races) and the ability to use pencils or paint brushes (33 percent versus 20 percent for white, non-Hispanic and 15 percent for other races). That a child not be disruptive in class is also more important to black, non-Hispanic teachers (73 percent) than to white, non-Hispanic teachers (58 percent). Black, non-Hispanic and white, non-Hispanic teachers hold similar views regarding knowledge of the English language, with 43 percent of white teachers and 48 percent of black teachers considering this very important or essential compared with only 19 percent of teachers of other racial/ethnic groups.

## **Kindergarten Teachers' Views On School Readiness**

The survey was designed to obtain information about public school kindergarten teachers' views on a variety of issues that relate to school readiness. These can be roughly grouped into readiness for school, reading readiness, parental roles, and teaching practices. A 5-point scale was used to determine the extent to which teachers agree or disagree with 17 statements (see attached questionnaire and table 4 for a complete list of these statements and the response scale). Data presented in this section and in table 5 combine the "agree" and "strongly agree" response categories.

## Readiness for School

Most teachers (88 percent) agree with the statement that readiness for school comes as children grow and mature and cannot be pushed (table 5 and table A). At the same time, teachers also believe that they can enhance a child's readiness by providing experiences children need to build important skills (94 percent). Only about half (56 percent) believe that children with readiness problems should enter school as soon as they are eligible so that they can be exposed to the things they need, and that preschool experience is very important for success in kindergarten (53 percent). On the other hand, about the same proportion (55 percent) would suggest waiting a year before enrolling a child in kindergarten if the child appears unready for it.

Table A.--Percentage of public school kindergarten teachers indicating agreement or strong agreement with statements concerning readiness for school: United States, 1993

Readiness for school	Percent of teachers
I can enhance children's readiness by providing experiences they need to build important skills . . . . .	94
Readiness comes as children grow and mature; you can't push it . . . . .	88
Children with readiness problems should enter school as soon as they are eligible so that they can be exposed to the things they need. . . . .	56
If a child appears to be unready for kindergarten, I would suggest he or she wait a year before enrolling . .	55
Attending preschool is very important for success in kindergarten . . . . .	53

Teachers in high poverty schools, those with high minority enrollments in their kindergarten classes, and black, non-Hispanic teachers are more likely to think that children with readiness problems should enter school as soon as they are eligible so they can be exposed to the things they need. Sixty-seven percent of teachers in high poverty schools and 66 percent teaching classes with high minority enrollments recommend entrance upon eligibility for children with readiness problems (compared with 43 to 54 percent, respectively, in low and medium poverty schools, and 52 to 53 percent, respectively, teaching classes with low or medium

minority enrollments). Three-fourths (76 percent) of black, non-Hispanic teachers advocate non-delay of school entrance compared with 54 percent of white, non-Hispanic teachers.

These same groups of teachers also support more strongly the idea that attending preschools is very important for success in kindergarten (63 percent of those in high poverty schools compared with 40 percent in low poverty schools, and 68 percent in classes with high minority enrollments compared with 42 percent in low minority classes). Black, non-Hispanic and other minority teachers (74 percent for each) also are more inclined to consider preschool important for kindergarten success than their white, non-Hispanic counterparts (50 percent), as are a large proportion of teachers in city schools (64 versus 42 to 51 percent in other locales).

## Reading Readiness

Generally, a minority of public school kindergarten teachers believe that children who begin formal reading and math instruction in preschool will do better in elementary school. Overall, only 30 percent think that preschool instruction of this type has a lasting value (table 5 and table B). Only 15 percent of kindergarten teachers believe that most children should learn to read in kindergarten. In addition, 44 percent believe that kindergarten children should not be given reading instruction unless they show an interest.

Table B.--Percentage of public school kindergarten teachers indicating agreement or strong agreement with statements concerning reading readiness: United States, 1993

Reading readiness	Percent of teachers
Kindergarten children should not be given reading instruction unless they show an interest . . . . .	44
Children who begin formal reading and math instruction in preschool (nursery or prekindergarten) will do better in elementary school. . . . .	30
Most children should learn to read in kindergarten . . .	15

Not all groups of teachers hold similar views. Teachers in schools with higher levels of poverty are more inclined to believe in the value of early formal instruction. Whereas only 18 percent of teachers in schools with low poverty believe that children exposed to formal reading and math instruction in preschool will do better in elementary school, this view is

held by 25 percent of teachers in schools with medium poverty and 43 percent in schools that have high levels of poverty. Teachers in classes with high minority enrollments are also more likely to believe early formal instruction will have a lasting positive effect (44 percent compared with 24 and 25 percent in classes with low and medium minority enrollments). Black, non-Hispanic teachers are considerably more likely to perceive a benefit from formal instruction in preschool than white, non-Hispanic teachers (67 versus 26 percent), with teachers belonging to other racial/ethnic groups (40 percent) falling in the middle.

Black, non-Hispanic teachers are also more likely than white, non-Hispanic teachers (39 versus 12 percent) to believe that children should learn to read in kindergarten. Those in schools with high levels of poverty (21 percent versus 8 percent in schools with low levels of poverty) and in classes with large minority enrollments (20 percent versus 12 percent in classes with low minority enrollments) are also more likely to feel this way.

### **Parental Roles in Preparing Children for School and Learning**

Reading to children and playing counting games at home regularly are the most widely agreed upon ways parents can contribute to their young children's preparation for school and learning. Almost all (99 percent) public school kindergarten teachers feel that parents should read to their children and play counting games at home regularly (table 5 and table C). Ensuring that a child knows the alphabet before starting kindergarten

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Table C.--Percentage of public school kindergarten teachers indicating agreement or strong agreement with statements concerning parental roles in preparing children for school and learning: United States, 1993

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Parents roles in preparing children for school and learning	Percent of teachers
Parents should read to their children and play counting games at home regularly . . . . .	99
Parents should set aside time every day for their kindergarten children to practice schoolwork . . . . .	49
Parents should make sure that their children know the alphabet before they start kindergarten . . . . .	27

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is viewed as less important. Overall, only 27 percent of all kindergarten teachers feel that this is important for school readiness, as compared to 57 percent of black, non-Hispanic teachers. To a lesser degree, teachers in schools in the city, in schools with high poverty status, and in classes with high minority enrollments are also more likely to agree that parents should make sure their children start school knowing the alphabet compared with all teachers (from 34 to 36 percent, respectively).

About half (49 percent) of kindergarten teachers believe that parents should set aside time every day for their kindergarten children to practice schoolwork. This practice receives the greatest support from teachers in large schools, city schools, and schools with high poverty levels; of classes with high minority enrollments; and from minority teachers. Almost two-thirds of teachers in large schools (63 percent) believe that parents should set aside time daily for their children to practice schoolwork, compared with 43 percent in small schools and 48 percent in medium schools. Similarly, 58 percent of teachers in city schools advocate this practice, compared with 39 to 48 percent of teachers in other locales. In schools with high poverty levels, 64 percent of kindergarten teachers agree with this practice, whereas in schools with medium or low poverty levels, the proportions decrease to 32 percent and 43 percent, respectively. Teachers in classes with high minority enrollments are more likely to favor this practice (69 percent) than are teachers in classes with small (38 percent) or medium (41 percent) minority enrollments. Less than half (46 percent) of white, non-Hispanic teachers advocate this parental practice, compared with 68 percent of black, non-Hispanic teachers and 65 percent of those of all other races.

## Teaching Practices

Teachers overwhelmingly believe that one of the best ways to help children learn to read is by reading to them; 97 percent of all public school kindergarten teachers agree with this statement (table 5 and table D). Conversely, only 14 percent think that the best way to learn how to read is to practice matching letters and sounds over and over. Teachers in high poverty schools (21 percent) are more likely to believe in the importance of matching letters than are teachers in low (8 percent) or medium poverty (12 percent) schools. Black, non-Hispanic teachers (45 percent) advocate this practice more than white, non-Hispanic teachers (12 percent) and those of other races (11 percent).

Almost 1 in 5 public school kindergarten teachers (19 percent) believe it is appropriate to give kindergartners homework every day. This attitude is more prevalent among teachers in large schools (33 percent), city schools (33 percent), high poverty schools (29 percent), and high minority enrollment classes (34 percent), and among those of minority racial/ethnic groups (41 percent for black, non-Hispanic and 40 percent for other races).

Table D.--Percentage of public school kindergarten teachers indicating agreement or strong agreement with statements concerning teacher expectations and practices: United States, 1993

Teaching practices	Percent of teachers
One of the best ways to help children learn to read is by reading to them . . . . .	97
I communicate with the first grade teachers so they can proceed from where I have left off . . . . .	85
I hesitate to send children on to first grade if I feel they are not ready for the demands that they will meet there .	70
I assume that by the end of the kindergarten year, all children will be ready for first grade . . . . .	27
The best way to learn how to read is to practice matching letters and sounds over and over . . . . .	14

Only 27 percent of all kindergarten teachers assume that by the end of the kindergarten year all children will be ready for first grade. Minority teachers are more likely to expect all their kindergartners to be ready to move on to first grade than non-minority teachers (39 and 42 percent for black, non-Hispanic and all other races, respectively, compared to 24 percent for white, non-Hispanic). Seventy percent of all public school kindergarten teachers indicate that they would hesitate to send children to first grade if they felt the children were not ready for the demands that they will meet there.

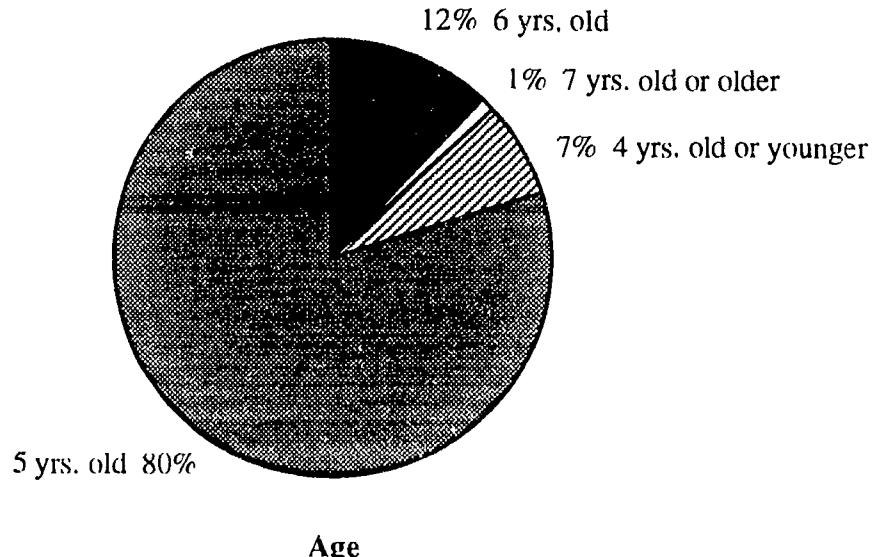
Regarding the transition to first grade, 85 percent of kindergarten teachers indicate that they communicate with the first grade teachers so that those teachers can proceed from where the kindergarten teacher has left off. The prevalence of this type of communication does not vary by school or teacher characteristics.

## Characteristics Of Public School Kindergarten Students And Classes

### Students

Teachers were asked to report on the composition of their kindergarten classes by age and race/ethnicity of students. As of October 1, 1992, 80 percent of kindergartners were 5 years old (figure 2). The remaining 20 percent were divided as follows: 12 percent were 6 years old, 7 percent were 4 years old or younger, and only 1 percent were 7 or older.<sup>1</sup>

Figure 2.--Age distribution of public school kindergarten students on October 1, 1992: United States, 1993



SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

By racial/ethnic composition, 66 percent of the students were white, non-Hispanic, 17 percent were black, non-Hispanic, 12 percent were Hispanic, 3 percent were Asian or Pacific Islander, and 1 percent were American Indian or Alaskan Native (table 6). Variations in the percentage of minority student enrollment in the class occurred by school size, metropolitan status, geographic region, and poverty status.

In small schools, 26 percent of the students were racial/ethnic minorities, compared to 51 percent of the students in large schools (derived from table 6). City schools enrolled the largest proportion of minority kindergarten students (55 percent); the proportion of minority students in other locales ranged from 27 percent in schools in the urban fringe to 17 percent in rural schools.

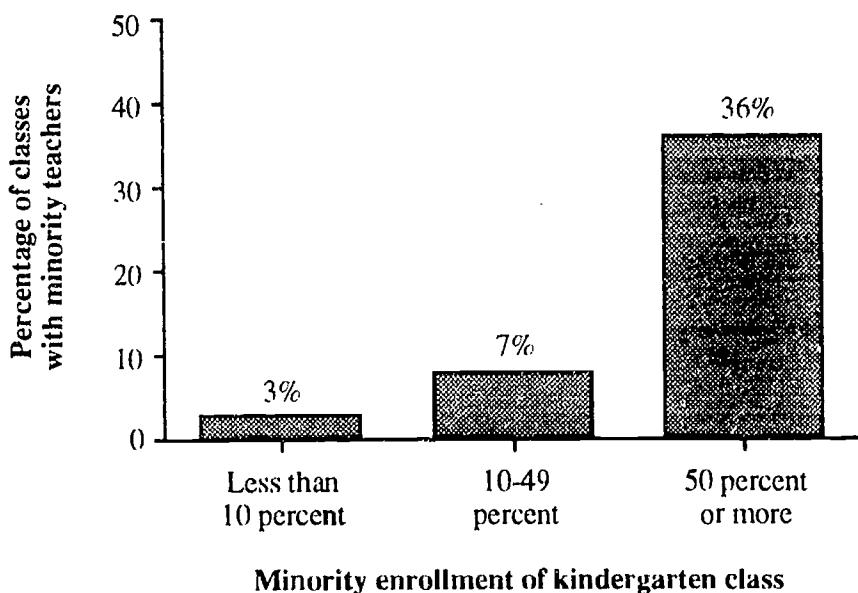
<sup>1</sup>Enrollment was obtained for all children in the kindergarten class. For multigrade classes, both total class size and number of kindergarten students were collected. Age break-outs are reported for kindergartners only.

Geographically, minority enrollment ranged from 44 percent in the West, 36 percent in the Southeast, 28 percent in the Northeast, and 23 percent in the Central region. Minority composition of the kindergarten class and poverty status of the school were related, with a higher proportion of minority students (64 percent) in high poverty schools than in low poverty schools (13 percent).

Kindergarten classes with the highest percentage of minority students had the largest proportion of minority teachers (figure 3). In classes with less than 10 percent minority children, only 3 percent of the kindergarten teachers were minority. The percentage of minority teachers increased to 7 percent in kindergarten classes with 10 to 49 percent minority enrollments and to 36 percent in classes with 50 percent or more minority enrollments.

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**Figure 3.--Percentage of public school kindergarten classes with minority teachers, by minority enrollment of kindergarten classes: United States, 1993**



SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

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## **Kindergarten Class Characteristics**

In the 1992-93 school year, most (71 percent) kindergartens met 5 days a week (not shown in tables). Full-day kindergartens met an average of 31 hours per week, whereas half-day kindergartens met either 16 hours (when two half-day sessions were taught) or 14 hours (when only one half-day session was taught) per week (table 7). Teachers reported an average kindergarten class size of 21 students in full day kindergarten classes and 22 students in half day classes. Class size was fairly stable across various school characteristics, with the exception that kindergarten classes in rural schools tended to be somewhat smaller (mean of 18 students) than those in other locales.

Almost two-thirds (61 percent) of kindergarten teachers had the help of paid adult assistants (including co- or team teachers) in their classes during 1992-93 (table 8). Teachers with paid assistants had 1 assistant, on average, for an average of 13.5 hours per week--or 64 percent of the time that class met. In addition, 49 percent of kindergarten teachers reported having the assistance of at least 1 adult volunteer during a typical week (table 9). Typically, 3 volunteers, each contributing an average of 3 hours per week, assisted teachers who had access to adult volunteers.

Counting the paid assistants or team teachers, the average student-to-staff ratio (based on full-time-equivalents) for kindergarten classes during the 1992-93 school year was 15 to 1 (table 8). When adult volunteers were added to the picture, the student-to-adult ratio (also based on full-time-equivalents) was 14 to 1 (table 9).<sup>2</sup>

## **Kindergarten Classrooms And Activities**

### **Classroom Arrangement**

Another purpose of this study was to explore the characteristics of kindergarten classes in terms of the physical arrangement of kindergarten classrooms, the types of activities teachers include in their curricula, and whether the physical arrangement was related to the types of activities.

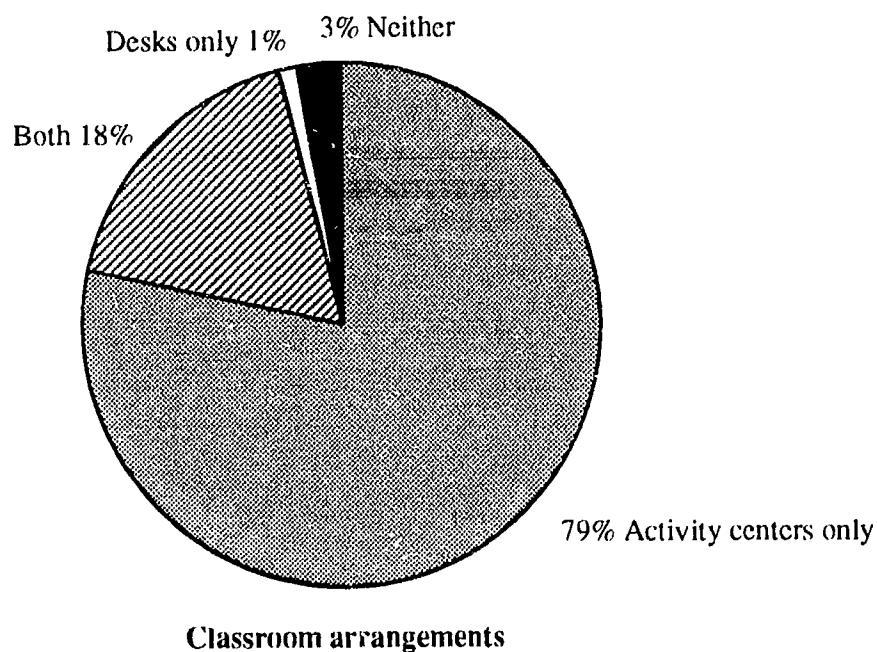
Teachers were asked whether their classrooms had activity centers and whether each child had his or her own desk. Use of activity centers generally is viewed as reflective of a child-centered approach to early education and more conducive to interactive, hands-on learning. By contrast, use of individual desks is viewed as indicative of a more teacher-directed approach to learning and more conducive to formal, group instruction. The vast majority (97 percent) of kindergarten classes in public schools had activity centers (table 10); 19 percent were set up with a desk for each child. Only 1 percent of kindergarten classes had

<sup>2</sup>The number of paid and volunteer assistants and the number of hours per week each assistant spent in the classroom were obtained on the survey along with total hours the class met. This information was used to compute full-time-equivalents for paid and volunteer assistants. The student-to-staff ratio was computed using total class size. For mixed-grade classes, all students (including nonkindergarten students) were counted. Staff included teachers and paid assistants. In the student-to-adult ratio, total class size was used and adults included the teacher, paid assistants, and adult volunteers.

desks for each child but no activity centers, whereas 79 percent had activity centers but no desks (figure 4). About one-fifth (18 percent) had both desks and activity centers, and 3 percent had neither desks nor activity centers. Since so few kindergartens had desks but no activity centers, the activity center versus desk classification could not be used for analyzing classroom activities.

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**Figure 4.--Percentage of public school kindergarten classes with activity centers and desks for each child: United States, 1993**



NOTE: Percentages do not add to 100 because of rounding.

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

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### **Formal Teacher-Led Instruction versus Individual or Small Group Activities Selected by Children**

Teachers were asked to estimate the average amount of time each day that their kindergarten class spent in formal group instruction led by the teacher in reading, numbers, or the alphabet. The survey also obtained estimates of the average amount of time spent in individual or small group activities planned by the teacher and selected by the children.

Teachers indicated that, overall, about the same amount of time was spent in each type of activity (table 10). In a typical day in public school kindergartens, 31 percent of the day was spent in teacher-directed formal instruction, and about the same amount of time (30 percent) was spent in

individual or small group projects in which children selected the activities. No significant variation was found across school or teacher characteristics.

## **Classroom Activities**

Teachers also were given the following list of activities and asked how frequently a typical child engaged in each during the week: never, 1-2 days a week, 3-4 days a week, and 5 days a week:

- Running, climbing, jumping, and other gross motor activities,
- Free play,
- Choosing from a set of specified options (like building blocks, manipulatives, or books),
- Using manipulatives for math or science,
- Using worksheets for math or science,
- Using worksheets for literacy skills,
- Listening to stories read aloud, and
- Dramatic play, arts and crafts, music (creative activities).

The most frequently reported activity was listening to stories: 90 percent of kindergarten classes listened to stories 5 days a week (table 11). Children in about two-thirds of the classes participated daily in creative activities such as dramatic play (64 percent), free play (66 percent), and choosing from a set of specified options available in the class (69 percent). Daily engagement in gross motor activities like running and jumping occurred in 58 percent of the classes, and 49 percent of the classes used manipulatives for math or science every day. Worksheets were the least used activity; teachers of only 14 percent of kindergarten classes reported daily use of worksheets for math or science and 18 percent for literacy skills.

Although there was some variation in frequency of activities by school characteristics, these variations were slight and did not form a consistent pattern (table 12). There were differences, however, by some teacher characteristics and whether the kindergarten program was full-day or half-day.

Daily participation in dramatic play, arts and crafts, and other creative activities increased with the experience of teachers, from 56 percent of classes with teachers who have taught kindergarten less than 5 years to 69 percent of classes with teachers who have taught kindergarten 11 or more years. A similar pattern occurred with number of early childhood education courses; a higher proportion of classes whose teachers had

taken five or more early childhood courses had daily creative activities than did those classes whose teachers had taken less than five courses.

Since the full-day program, by definition, is longer than the half-day program, there are more opportunities for students to engage in various activities daily (table E). The largest differences between full- and half-day programs occurred in gross motor activities and use of manipulatives for math or science. Gross motor activities were daily occurrences in 72 percent of the full-day kindergarten classes, but in only 48 percent of the half-day classes. Similarly, manipulatives were used daily in 61 percent of full-day kindergartens, compared with 41 percent of half-day kindergartens. Although not prevalent in any kindergarten classes, worksheets were used more regularly in full-day classes than in half-day classes. One-fourth of full-day classes used worksheets for literacy skills and 20 percent used them for math or science, compared with 13 and 9 percent, respectively, of half-day classes. Full-day kindergartens also engaged in free play more often than half-day kindergartens--72 percent versus 62 percent. Perhaps, the interesting point is that frequency of listening to stories read aloud and creative activities did not differ significantly by length of kindergarten class (full- or half-day).

Table E.--Percentage of public school kindergarten classes in which a typical child engages in various activities 5 days a week, by length of kindergarten class: United States, 1993

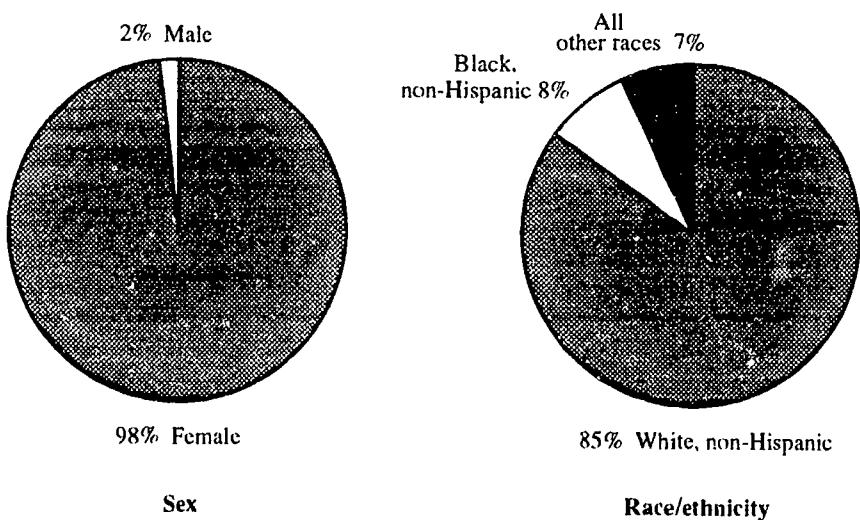
Activity	Length of kindergarten class	
	Full-day	Half-day
Running, climbing, jumping, and other gross motor activities . . . . .	72	48
Free play . . . . .	72	62
Choosing from a set of specific options (like building blocks, manipulatives, or books) . . . . .	72	67
Using manipulatives for math or science	61	41
Using worksheets for math or science .	20	9
Using worksheets for literacy skills . .	25	13
Listening to stories read aloud . . . . .	91	90
Dramatic play, arts and crafts, music (creative activities) . . . . .	66	63

The likelihood of children participating in gross motor activities also varied by teacher assignment (table 12). Although the overall trend was for more daily running, climbing, and jumping in full-day than in half-day classes, the main difference occurred in classes where teachers taught two half-day classes (41 percent of classes, compared with 68 percent of classes whose teachers taught one half-day class and 72 percent of full-day classes).

## Characteristics Of Public School Kindergarten Teachers

In spring 1993, an estimated 119,200 teachers taught kindergarten students in U.S. public schools. Among the nation's public school kindergarten teachers, almost all (98 percent) were women; 85 percent were white, non-Hispanic, 8 percent black, non-Hispanic, and 7 percent other racial/ethnic groups (figure 5 and table 13).

**Figure 5.--Percentage of public school kindergarten teachers, by sex and race/ethnicity: United States, 1993**



SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

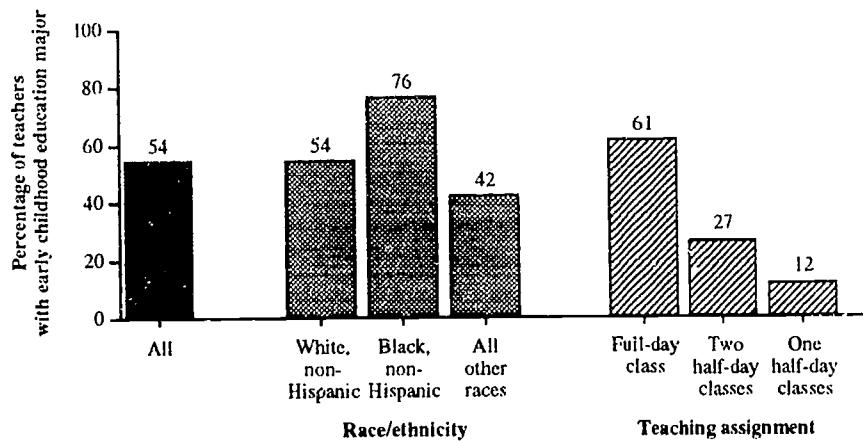
On average, public school kindergarten teachers have been teaching for 14 years, with 9 years of experience at the kindergarten level (table 14). About half (54 percent) majored in early childhood education at either the undergraduate or graduate level, and almost all (93 percent) have completed coursework in early childhood education (not shown in tables). Overall, kindergarten teachers reported taking an average of 9 courses in early childhood education; those majoring in early childhood education have completed an average of 12 such courses (table 14).

Nearly a third (29 percent) of public school kindergarten teachers hold membership in a professional association for early childhood education. Of those majoring in early childhood education, 35 percent are association members.

The likelihood of a kindergarten teacher having an educational background in early childhood education varies by geographic region, number of years teaching kindergarten, teaching assignment (full-day, two half-days, one half-day), and race/ethnicity of the teacher. About three-fourths of kindergarten teachers (79 percent) in the Southeast region of the country majored in early childhood education at either the undergraduate or graduate level, compared to 53 percent in the Northeast and 41 percent in both the Central and Western regions. Teachers who have been teaching kindergarten 11 or more years are more likely to have majored in early childhood education (61 percent) compared to those with less than 5 years of kindergarten experience (49 percent). A higher proportion of teachers of full-day kindergarten classes (61 percent) had majored in early childhood education than had those teaching two half-day classes (27 percent) and those teaching only one half-day class (12 percent; table 14 and figure 6). Black, non-Hispanic kindergarten teachers were more likely to have majored in early childhood education than teachers of other racial/ethnic groups: 76 percent of black, non-Hispanic teachers compared to 54 percent of white, non-Hispanic teachers and 42 percent of teachers of all other races.

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**Figure 6.--Percentage of public school kindergarten teachers with early childhood education majors, by race/ethnicity and teaching assignment: United States, 1993**



SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

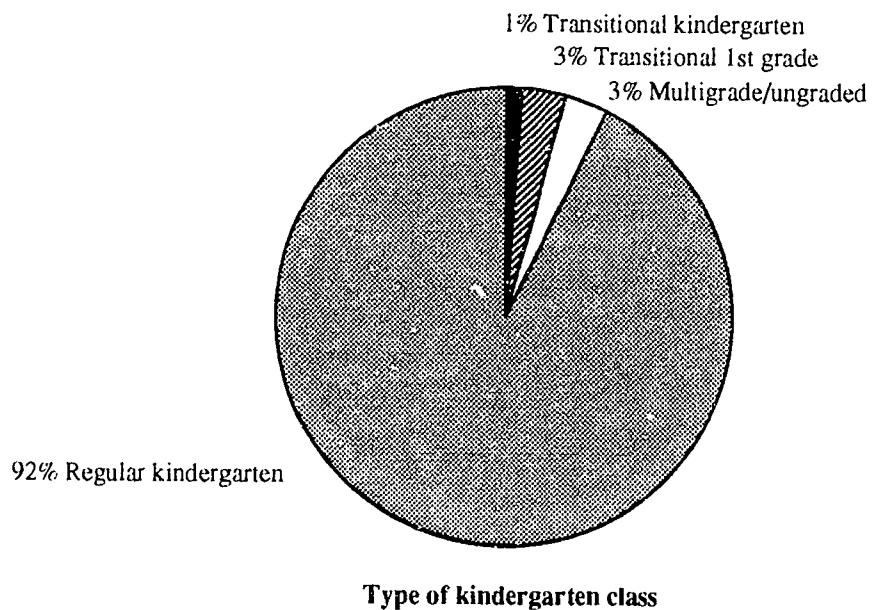
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## Kindergarten Programs Taught

Most kindergarten teachers (92 percent) taught regular kindergarten classes in spring 1993, 1 percent taught transitional or readiness kindergarten (an extra year of school for kindergarten-aged children who are judged not ready for kindergarten), 3 percent taught transitional first grade (an extra year of school for children who have attended kindergarten and have been judged not ready for first grade), and 3 percent taught kindergarten children in a multigrade or ungraded class setting (figure 7). Although one of the original goals of this survey had been to examine teacher beliefs and practices by the type of class taught, the small number of teachers in either transitional or ungraded classes precludes such comparisons, since those estimates would not be very reliable.

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**Figure 7.--Percentage of public school kindergarten teachers indicating type of kindergarten class taught: United States, 1993**



NOTE: Percentages do not add to 100 because of rounding.

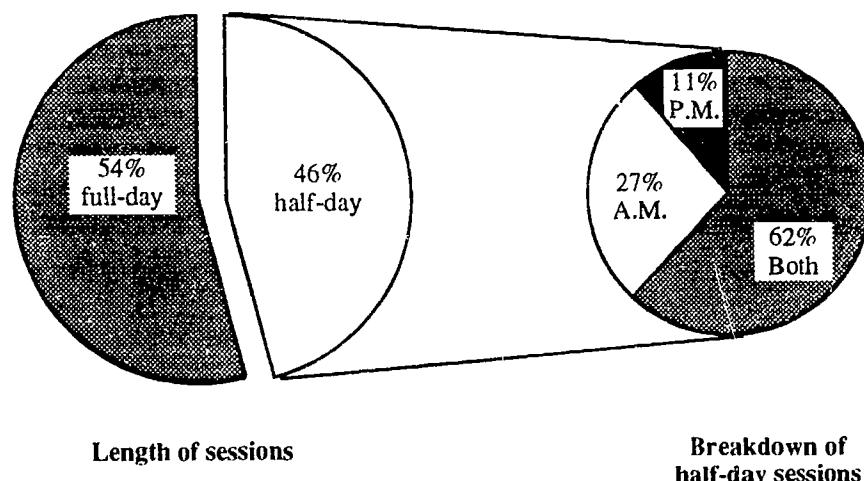
SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

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About half (54 percent) of kindergarten teachers taught in full-day classes, and 46 percent taught half-day classes. Of those teaching half-day classes, 62 percent taught both morning and afternoon sessions, 27 percent taught morning sessions only, and 11 percent taught afternoon sessions only (figure 8 and table 13).

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**Figure 8.--Percentage of public school kindergarten teachers, by length and session time of kindergarten program: United States, 1993**



NOTE: Percentages do not add to 100 because of rounding.

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

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The likelihood of teachers teaching a full-day kindergarten class varied with the following school characteristics: poverty status, minority enrollment, geographic region, and metropolitan status. Two-thirds (67 percent) of teachers in schools with high poverty taught full-day kindergarten classes, whereas less than one-third (29 percent) of teachers in schools with low poverty taught full-day kindergartens (table 13). A similar pattern occurred by minority enrollment of the class. Teachers of kindergarten classes with high minority enrollments were more likely to teach full-day classes than were teachers of classes with low minority enrollments (67 versus 43 percent).

Kindergarten teachers in the Southeast were twice as likely to teach full-day classes as their counterparts in other regions of the country (89 percent in the Southeast versus from 33 percent in the Central region to 43 percent in the Northeast). By metropolitan status of schools, the proportion of kindergarten teachers who taught full-day classes was only 39 percent in schools on the urban fringe compared to 66 percent in rural

39 percent in schools on the urban fringe compared to 66 percent in rural schools, 59 percent in city schools, and 53 percent for kindergarten teachers teaching in schools in towns.

## Summary

Public school kindergarten teachers agree that physical well being, social development, and curiosity are more important for kindergarten readiness than knowledge of discrete skills. Almost all teachers state that being physically healthy, rested, and well-nourished is a very important or essential quality for kindergarten readiness. In addition, more than three-fourths believe that children should be able to communicate needs, wants, and thoughts in their own language and that they should be enthusiastic and curious when approaching new activities. Conversely, less than one-fourth think it very important that children have good problem-solving skills, can identify primary colors and basic shapes, be able to use pencils, know the alphabet, or count to 20. In fact, over half of the teachers state that it is not very (or not at all) important to know the alphabet or count in order to be ready for kindergarten. Regarding other qualities--such as knowing the English language, not being disruptive of the class, being able to sit still and pay attention--teachers are more divided. Roughly half (between 40 and 60 percent) consider these very important qualities, but the remainder see them as only somewhat important or not important.

Kindergarten teachers' views on school readiness and how to facilitate learning show even greater diversity and some contradiction. Although almost all teachers believe that read'ness comes with time to mature and cannot be pushed, they also believe that they can enhance readiness by providing children with skill-building experiences. About half of the teachers would enroll children in kindergarten when they are eligible, even if they seem to be unready for school, whereas half would suggest that children with readiness problems wait a year before enrolling in kindergarten.

Kindergarten teachers almost universally agree that parents should read to their children and play counting games at home regularly and that one of the best ways to help children learn to read is to read to them. In keeping with their teachers' attitudes toward reading, children in 90 percent of kindergarten classes listened to stories read aloud daily during a typical week in the 1992-93 school year.

In summary, the survey has answered some of the questions that were posed in the background section. Most kindergarten teachers believe enthusiasm and curiosity are more important than knowing the alphabet or counting. There is consensus on some practices to help develop readiness and diversity of opinions on others. Further exploration of the interrelations among the different beliefs and attitudes about readiness, which is currently being done, may shed some clarification on the dimensionality of readiness.

# **Survey Methodology And Data Reliability**

## **Sample Selection**

**A** two-stage sampling process was used to select teachers for the FRSS Kindergarten Teacher Survey on Student Readiness. At the first stage, a stratified sample of 860 schools was drawn from the 1990-91 list of public schools compiled by the National Center for Education Statistics (NCES). This complete file contains about 85,000 school listings, including over 47,000 schools with kindergartens, and is part of the NCES Common Core of Data (CCD) School Universe. Regular schools with kindergartens in the 50 states and the District of Columbia were included in the sampling frame. Special education and alternative schools, schools in the outlying territories, and those without kindergartens were excluded from the frame prior to sampling. With these exclusions, the final sampling frame consisted of approximately 47,000 eligible schools.

The sample was stratified by size of school, region (Northeast, Central, Southeast, and West) and metropolitan status (city, urban fringe, town, rural). Within each of the major strata, schools were sorted by enrollment size, percentage of students eligible for free or reduced-price lunch, and percentage of minority students. The allocation of the sample to the major strata was made in a manner that was expected to be reasonably efficient for national estimates, as well as for estimates for major subclasses. Schools within a stratum were sampled with probabilities proportionate to the estimated number of kindergarten teachers in the school.

It should be noted that the number of kindergarten teachers is not available in the CCD school file; for sampling, the estimates for this figure were derived by applying an overall student-to-teacher ratio to the school-level kindergarten enrollment counts to derive a rough measure of size for each school in the frame.

## **Teacher Sampling**

The 860 schools in the sample were contacted during fall 1992, and asked to provide a list of all kindergarten teachers in each school for sampling purposes. Eligible teachers included all persons teaching a regular kindergarten class, a transitional or readiness kindergarten class, or a transitional first grade. Teachers employed full or part time at the school were included. Excluded from the list were itinerant teachers (unless homebase school), substitute teachers, teachers' aides, special education teachers, special subject teachers (those teaching only physical education, music, etc.), prekindergarten teachers, regular first grade teachers, and any other teachers who did not teach a regular kindergarten, transitional kindergarten, or transitional first grade class. A list of 2,900 kindergarten teachers was compiled, and a final sample of 1,448 teachers was drawn. The selection of teachers was designed to permit separate estimates of teachers' responses by major subclasses. However, analysis by race/ethnicity, sex, or type of kindergarten class taught (regular versus transitional) is limited since special efforts were not taken to oversample rare populations (e.g., males, minorities, and transitional teachers). On average, one or two teachers were sampled

from each school. The survey data were weighted to reflect these sampling rates (probability of selection) and were adjusted for nonresponse. In addition, class weights, which provided national estimates of kindergarten classes, were calculated for items dealing with kindergarten classes and students. Since most public school kindergarten teachers taught only one class, the class weight and teacher weight were identical in most instances. However, for the 28 percent of teachers who taught two kindergarten classes, the teacher weight was multiplied by two to obtain the class weight.

## **Response Rates**

At the first stage of sampling of 860 schools, 17 schools were found to be out of the scope of the study (because of closings or because they no longer offered kindergarten). Of the remaining 843 eligible schools, 825 provided complete lists of kindergarten teachers. The school-level response was 98 percent (825 responding schools divided by the 843 eligible schools in the sample).

In February 1993, questionnaires (see appendix A) were mailed to 1,448 kindergarten teachers at their schools. Teachers were asked to complete the questionnaire in reference to the full- or half-day kindergarten class they taught. Those teaching both a morning and afternoon class were asked to report for only one of these classes. The sample was randomly split in two, with half receiving instructions to select their morning class and the other half asked to report for their afternoon class. Thirty-two teachers were found to be out of scope (no longer at the school or otherwise not eligible), leaving 1,416 eligible teachers in the sample. Telephone followup of nonrespondents was initiated in late February; data collection was completed by mid-April with 1,339 teachers completing the survey. Of these, 779 teachers (58 percent) completed the mailed questionnaire; telephone interviews were conducted with the remaining 560 teachers (42 percent). The teacher-level response was 95 percent (1,339 teachers who completed the questionnaire divided by the 1,416 eligible teachers in the sample). The overall study response rate was 92 percent (97.8 percent rate of school response multiplied by the 94.5 percent response rate at the teacher level). The weighted overall response rate was 95 percent (98 percent weighted school response rate multiplied by the 97 percent weighted teacher response rate). Item nonresponse ranged from 0.0 percent to 0.9 percent.

## **Sampling and Nonsampling Errors**

The response data were weighted to produce national estimates. The weights were designed to adjust for the variable probabilities of selection and differential nonresponse. A final poststratification adjustment was made so that the weighted teacher counts equaled the corresponding estimated teacher counts from the CCD frame within cells defined by size of school, region, and metropolitan status. The findings in this report are estimates based on the sample selected and, consequently, are subject to sampling variability.

The survey estimates are also subject to nonsampling errors that can arise because of nonobservation (nonresponse or noncoverage) errors, errors of reporting, and errors made in collection of the data. These errors can sometimes bias the data. Nonsampling errors may include such problems as the differences in the respondents' interpretation of the meaning of the questions; memory effects; misrecording of responses; incorrect editing, coding, and data entry; differences related to the particular time the survey was conducted; or errors in data preparation. While general sampling theory can be used in part to determine how to estimate the sampling variability of a statistic, nonsampling errors are not easy to measure and, for measurement purposes, usually require that an experiment be conducted as part of the data collection procedures or that data external to the study be used.

To minimize the potential for nonsampling errors, the questionnaire was pretested with kindergarten teachers like those who completed the survey. During the design of the survey and the survey pretest, an effort was made to check for consistency of interpretation of questions and to eliminate ambiguous items. The questionnaire and instructions were extensively reviewed by the National Center for Education Statistics and staff of the National Education Goals Panel. Manual and machine editing of the questionnaire responses were conducted to check the data for accuracy and consistency. Cases with missing or inconsistent items were recontacted by telephone. Imputations for item nonresponse were not implemented, as item nonresponse rates were less than 1 percent (for nearly all items, nonresponse rates were less than 0.5 percent). Data were keyed with 100 percent verification.

## Variances

The standard error is a measure of the variability of estimates due to sampling. It indicates the variability of a sample estimate that would be obtained from all possible samples of a given design and size. Standard errors are used as a measure of the precision expected from a particular sample. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the true population parameter being estimated in about 95 percent of the samples. This is a 95 percent confidence interval. For example, the estimated percentage of teachers reporting that they have activity centers in their classes is 97 percent, and the estimated standard error is 0.7 percent. The 95 percent confidence interval for the statistic extends from  $[97 - (0.7 \text{ times } 1.96)]$  to  $[97 + (0.7 \text{ times } 1.96)]$  or from 95.6 to 98.3 percent.

Estimates of standard errors were computed using a technique known as jackknife replication. As with any replication method, jackknife replication involves constructing a number of subsamples (replicates) from the full sample and computing the statistic of interest for each replicate. The mean square error of the replicate estimates around the full sample estimate provides an estimate of the variance of the statistic (see Wolter 1985, Chapter 4). To construct the replications, 30 stratified subsamples of the full sample were created and then dropped one at a

## Background Information

time to define 30 jackknife replicates (see Wolter 1985, page 183). A proprietary computer program (WESVAR), available at Westat, Inc., was used to calculate the estimates of standard errors. The software runs under IBM/OS and VAX/VMS systems.

The survey was performed under contract with Westat, Inc., using the Fast Response Survey System (FRSS). Established in 1975 by NCES, FRSS was designed to collect small amounts of policy-oriented data quickly and with minimum burden on respondents. Over 45 surveys have been conducted through FRSS. Recent FRSS reports (available through the Government Printing Office) include the following:

- Office for Civil Rights Survey Redesign: A Feasibility Survey, Statistical Analysis Report (NCES 92-130).
- Public School District Survey on Safe, Disciplined, and Drug-Free Schools, E.D. TABS (NCES 92-008).
- Public School Principal Survey on Safe, Disciplined, and Drug-Free Schools, E.D. TABS (NCES 92-007).
- Teacher Survey on Safe, Disciplined, and Drug-Free Schools, E.D. TABS (NCES 91-091).

Westat's Project Director was Elizabeth Farris, and the Survey Manager was Sheila Heavside. Judi Carpenter was the NCES Project Officer. The data were requested by John Burkett, Data Development Division, NCES.

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For more information about the Fast Response Survey System or the Kindergarten Teacher Survey on Student Readiness, contact Judi Carpenter, Elementary/Secondary Education Statistics Division, Special Surveys and Analysis Branch, Office of Educational Research and Improvement, National Center for Education Statistics, 555 New Jersey Avenue, NW, Washington, DC 20208-5651, telephone (202) 219-1333.

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## Definitions

**Common Core of Data (CCD) Public School Universe** - A data tape containing 85,000 records, one for each public elementary and secondary school in the 50 states, District of Columbia, and 5 outlying areas, as reported to the National Center for Education Statistics by the State Education Agencies for 1990-91. Records on this file contain the state and federal identification numbers, name, address, and telephone number of the school, county name and FIPS code, school type code, enrollment size, and other codes for selected characteristics of the school.

**Kindergarten** - The traditional year of school primarily for 5-year-olds prior to first grade.

**Transitional (or Readiness) Kindergarten** - An extra year of school for kindergarten-age eligible children who are judged not ready for kindergarten.

**Transitional 1st Grade** - An extra year of school for children who have attended kindergarten and have been judged not ready for first grade.

## Metropolitan Status

**City** - A central city of a Standard Metropolitan Statistical Area (SMSA).

**Urban fringe** - A place within an SMSA of a large or mid-size central city and defined as urban by the U.S. Bureau of Census.

**Town** - A place not within an SMSA, but with a population greater than or equal to 2,500, and defined as urban by the U.S. Bureau of Census.

**Rural** - A place with a population less than 2,500 and defined as rural by the U.S. Bureau of Census.

## Region

**Northeast region** - Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

**Central region** - Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

**Southeast region** - Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia.

**West region** - Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oklahoma, Oregon, Texas, Utah, Washington, and Wyoming.

## **Tables of Estimates and Standard Errors**

Table 1--Number and percentage of public school kindergarten teachers in the study sample that responded and estimated number and percentage in the Nation, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Respondent sample		National estimates	
	Number	Percent	Number	Percent
All public school kindergarten teachers.....	1,339	100	119,200	100
School enrollment size				
Less than 500 .....	626	47	58,500	49
500 to 749 .....	430	32	36,800	31
750 or more.....	283	21	23,900	20
School kindergarten enrollment				
Less than 60 .....	306	23	29,700	25
60 to 99 .....	462	35	42,300	35
100 or more.....	571	43	47,300	40
Kindergarten class size				
Less than 20 .....	391	29	33,100	28
20 to 25 .....	617	46	55,800	47
26 or more.....	330	25	30,200	25
Metropolitan status				
City.....	425	32	39,800	33
Urban fringe .....	329	25	29,800	25
Town.....	330	25	26,000	22
Rural.....	255	19	23,600	20
Region				
Northeast.....	271	20	22,100	19
Central.....	255	19	23,700	20
Southeast.....	399	30	34,800	29
West.....	414	31	38,600	32
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	334	25	27,400	23
20 to 49 .....	497	37	44,100	37
50 or more.....	502	38	47,600	40

Table 1.-Number and percentage of public school kindergarten teachers in the study sample that responded and estimated number and percentage in the Nation, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Respondent sample		National estimates	
	Number	Percent	Number	Percent
Percentage minority enrollment in class				
Less than 10 .....	479	36	40,500	34
10 to 49 .....	462	35	41,700	35
50 or more .....	396	30	37,000	31
Years teaching				
Less than 5 .....	439	33	40,800	34
5 to 10 .....	466	35	40,500	34
11 or more .....	432	32	37,900	32
Teaching assignment				
Full-day class .....	721	54	64,500	54
Two half-day classes .....	385	29	32,800	28
One half-day class .....	233	17	21,900	18
With a major in early childhood education				
Yes .....	733	55	64,600	54
No .....	606	45	54,600	46
Member of early childhood education professional association				
Yes .....	396	30	35,000	29
No .....	943	70	84,200	71
Number of early childhood education courses				
Less than 5 .....	485	36	44,700	38
5 to 9 .....	325	24	28,000	24
10 or more .....	527	39	46,500	39
Race/ethnicity				
White, non-Hispanic .....	1,143	86	101,300	85
Black, non-Hispanic .....	99	7	9,500	8
All other races .....	95	7	8,300	7

NOTE: Percentages may not add to 100 because of rounding, and details may not add to totals because of item nonresponse and rounding for weighted estimates.

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 2.--Percentage of public school kindergarten teachers indicating extent of importance of various qualities for kindergarten readiness: United States, 1993

School readiness quality	Not at all important	Not very important	Somewhat important	Very important	Essential
Is physically healthy, rested, well-nourished.....	0	*	4	24	72
Finishes tasks.....	3	11	47	31	9
Can count to 20 or more .....	33	34	26	5	3
Takes turns and shares .....	2	8	34	37	19
Has good problem-solving skills.....	8	23	44	20	5
Is enthusiastic and curious in approaching new activities.....	1	3	19	43	33
Is able to use pencils or paint brushes.....	15	27	38	16	5
Is not disruptive of the class .....	2	8	30	36	24
Knows the English language.....	13	12	33	24	17
Is sensitive to other children's feelings.....	1	6	35	41	17
Sits still and pays attention.....	3	12	43	30	12
Knows the letters of the alphabet .....	27	30	33	6	4
Can follow directions.....	2	7	31	41	19
Identifies primary colors and basic shapes.....	13	24	40	17	7
Communicates needs, wants, and thoughts verbally in child's primary language.....	1	1	15	41	43

\* = Less than 0.5 percent.

NOTE: Percentages may not add to 100 because of rounding.

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 2a--Standard errors of the percentage of public school kindergarten teachers indicating extent of importance of various qualities for kindergarten readiness: United States, 1993

School readiness quality	Not at all important	Not very important	Somewhat important	Very important	Essential
Is physically healthy, rested, well-nourished.....	—	—	0.6	1.1	1.1
Finishes tasks .....	0.4	1.0	1.5	1.3	0.8
Can count to 20 or more .....	1.5	1.2	1.2	0.6	0.5
Takes turns and shares .....	0.4	0.9	1.4	1.3	1.2
Has good problem-solving skills.....	1.0	1.5	1.6	1.4	0.5
Is enthusiastic and curious in approaching new activities.....	0.3	0.4	1.5	1.4	1.6
Is able to use pencils or paint brushes.....	0.8	1.3	1.5	1.1	0.7
Is not disruptive of the class .....	0.4	0.9	1.2	1.3	1.3
Knows the English language .....	0.9	1.0	1.2	1.5	1.1
Is sensitive to other children's feelings.....	0.3	0.8	1.5	1.6	1.4
Sits still and pays attention.....	0.6	1.1	1.1	0.9	0.8
Knows the letters of the alphabet .....	1.3	1.2	1.3	0.5	0.5
Can follow directions.....	0.4	0.8	1.2	1.3	1.1
Identifies primary colors and basic shapes.....	0.9	1.2	1.5	1.0	0.8
Communicates needs, wants, and thoughts verbally in child's primary language.....	0.3	0.3	1.0	1.7	1.5

-- Estimate of standard error is not derived because it is based on a statistic estimated at less than 0.5 percent or at 100 percent.

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

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Table 3--Percentage of public school kindergarten teachers indicating various qualities are very important or essential (4 or 5 on the rating scale) for kindergarten readiness, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Is physically healthy, rested, well nourished	Finishes tasks	Can count to 20 or more	Takes turns and shares
All public school kindergarten teachers.....	96	40	7	56
School enrollment size				
Less than 500 .....	96	38	7	57
500 to 749 .....	94	43	7	57
750 or more.....	96	39	8	51
School kindergarten enrollment				
Less than 60 .....	97	42	8	60
60 to 99 .....	95	35	7	54
100 or more.....	95	43	8	55
Kindergarten class size				
Less than 20 .....	97	41	8	56
20 to 25 .....	96	42	8	59
25 or more.....	95	32	6	49
Metropolitan status				
City.....	95	41	11	53
Urban fringe.....	96	38	6	59
Town.....	95	40	5	59
Rural.....	96	40	6	52
Region				
Northeast.....	97	38	8	57
Central.....	95	43	10	57
Southeast.....	94	40	7	57
West.....	97	38	6	53
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	97	43	8	64
20 to 49 .....	95	40	6	55
50 or more.....	95	37	9	52
Percentage minority enrollment in class				
Less than 10 .....	97	44	8	58
10 to 49 .....	95	38	6	56
50 or more.....	95	37	11	52

Table 3--Percentage of public school kindergarten teachers indicating various qualities are very important or essential (4 or 5 on the rating scale) for kindergarten readiness, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Is physically healthy, rested, well nourished	Finishes tasks	Can count to 20 or more	Takes turns and shares
Years teaching kindergarten				
Less than 5	95	35	8	51
5 to 10	97	39	7	57
11 or more	95	45	8	60
Teaching assignment				
Full-day class	96	39	8	54
Two half-day classes	95	46	8	62
One half-day class	97	34	6	51
Major in early childhood education				
Yes	96	41	8	55
No	96	39	7	56
Member of early childhood education professional association				
Yes	96	42	6	59
No	96	39	8	54
Number of early childhood education courses				
Less than 5	96	39	7	55
5 to 9	96	40	9	56
10 or more	95	40	7	57
Race/ethnicity				
White, non-Hispanic	96	39	6	55
Black, non-Hispanic	92	52	23	63
All other races	99	39	8	57

Table 3.-Percentage of public school kindergarten teachers indicating various qualities are very important or essential (4 or 5 on the rating scale) for kindergarten readiness, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Has good problem solving skills	Is enthusiastic and curious in approaching new activities	Is able to use pencil or paint brushes
All public school kindergarten teachers.....	24	76	21
School enrollment size			
Less than 500 .....	24	77	20
500 to 749 .....	27	78	23
750 or more.....	20	73	19
School kindergarten enrollment			
Less than 60 .....	22	79	22
60 to 99 .....	24	73	19
100 or more.....	26	77	21
Kindergarten class size			
Less than 20 .....	22	76	23
20 to 25 .....	27	77	21
26 or more.....	23	75	17
Metropolitan status			
City.....	24	74	22
Urban fringe.....	25	75	19
Town .....	24	78	21
Rural.....	25	80	20
Region			
Northeast.....	24	80	19
Central.....	24	79	24
Southeast.....	23	78	22
West.....	26	71	19
Percentage of students in school eligible for free or reduced-price lunches			
Less than 20 .....	29	83	23
20 to 49 .....	23	76	21
50 or more.....	23	73	19
Percentage minority enrollment in class			
Less than 10 .....	26	84	23
10 to 49 .....	23	73	20
50 or more.....	24	71	20

Table 3--Percentage of public school kindergarten teachers indicating various qualities are very important or essential (4 or 5 on the rating scale) for kindergarten readiness, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Has good problem solving skills	Is enthusiastic and curious in approaching new activities	Is able to use pencil or paint brushes
Years teaching kindergarten			
Less than 5 .....	19	70	19
5 to 10 .....	25	77	20
11 or more .....	30	82	23
Teaching assignment			
Full-day class .....	23	74	21
Two half-day classes .....	29	81	23
One half-day class .....	22	76	16
Major in early childhood education			
Yes .....	26	77	22
No .....	23	75	19
Member of early childhood education professional association			
Yes .....	29	79	19
No .....	23	75	21
Number of early childhood education courses			
Less than 5 .....	22	72	20
5 to 9 .....	23	80	20
10 or more .....	28	79	22
Race/ethnicity			
White, non-Hispanic .....	24	77	20
Black, non-Hispanic .....	31	71	33
All other races .....	20	76	15

Table 3.--Percentage of public school kindergarten teachers indicating various qualities are very important or essential (4 or 5 on the rating scale) for kindergarten readiness, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Is not disruptive of the class	Knows the English language	Is sensitive to other children's feelings	Sits still and pays attention
All public school kindergarten teachers.....	60	42	58	42
School enrollment size				
Less than 500 .....	60	45	58	42
500 to 749 .....	59	39	59	42
750 or more.....	61	37	56	41
School kindergarten enrollment				
Less than 60 .....	65	50	60	46
60 to 99 .....	54	38	54	35
100 or more.....	62	40	60	45
Kindergarten class size				
Less than 20 .....	57	51	59	42
20 to 25.....	63	43	59	43
26 or more.....	58	30	55	39
Metropolitan status				
City.....	60	37	55	44
Urban fringe .....	63	35	58	42
Town .....	80	47	61	40
Rural .....	56	53	59	39
Region				
Northeast.....	64	38	60	45
Central.....	59	45	57	44
Southeast.....	62	53	60	42
West .....	56	31	54	39
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	61	40	61	46
20 to 49 .....	58	45	58	37
50 or more.....	61	39	56	43
Percentage minority enrollment in class				
Less than 10 .....	61	49	62	41
10 to 49 .....	58	41	57	42
50 or more.....	62	34	53	42

Table 3.-Percentage of public school kindergarten teachers indicating various qualities are very important or essential (4 or 5 on the rating scale) for kindergarten readiness, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Is not disruptive of the class	Knows the English language	Is sensitive to other children's feelings	Sits still and pays attention
<b>Years teaching kindergarten</b>				
Less than 5.....	56	42	52	37
5 to 10.....	60	41	60	43
11 or more.....	63	42	62	46
<b>Teaching assignment</b>				
Full-day class.....	61	45	58	42
Two half-day classes.....	59	42	59	46
One half-day class.....	58	32	54	34
<b>Major in early childhood education</b>				
Yes.....	61	43	58	43
No.....	59	40	58	40
<b>Member of early childhood education professional association</b>				
Yes.....	62	41	57	40
No.....	59	42	58	42
<b>Number of early childhood education courses</b>				
Less than 5.....	60	39	55	39
5 to 9.....	59	44	61	43
10 or more.....	60	43	58	43
<b>Race/ethnicity</b>				
White, non-Hispanic.....	58	43	57	41
Black, non-Hispanic.....	73	48	63	48
All other races.....	63	19	60	43

Table 3.--Percentage of public school kindergarten teachers indicating various qualities are very important or essential (4 or 5 on the rating scale) for kindergarten readiness, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Knows the letters of the alphabet	Can follow directions	Identifies primary colors and basic shapes	Communicates needs, wants, and thoughts verbally in child's primary language
All public school kindergarten teachers.....	10	60	24	84
School enrollment size				
Less than 500 .....	9	57	24	83
500 to 749 .....	12	62	26	84
750 or more.....	11	63	19	83
School kindergarten enrollment				
Less than 60 .....	9	61	22	82
60 to 99 .....	10	57	24	82
100 or more.....	11	62	24	86
Kindergarten class size				
Less than 20 .....	10	57	25	82
20 to 25 .....	11	62	26	85
26 or more.....	9	59	18	82
Metropolitan status				
City.....	15	59	25	81
Urban fringe .....	9	63	23	85
Town.....	7	59	23	85
Rural.....	8	58	23	84
Region				
Northeast.....	12	57	24	82
Central.....	8	63	24	80
Southeast.....	12	63	27	89
West.....	9	58	20	81
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	7	61	22	85
20 to 49 .....	9	61	21	84
50 or more.....	13	58	27	83
Percentage minority enrollment in class				
Less than 10 .....	7	60	24	84
10 to 49 .....	9	62	21	86
50 or more.....	15	58	26	80

Table 3.--Percentage of public school kindergarten teachers indicating various qualities are very important or essential (4 or 5 on the rating scale) for kindergarten readiness, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Knows the letters of the alphabet	Can follow directions	Identifies primary colors and basic shapes	Communicates needs, wants, and thoughts verbally in child's primary language
Years teaching kindergarten				
Less than 5	13	59	19	80
5 to 10	9	61	27	86
11 or more	9	60	25	84
Teaching assignment				
Full-day class	12	60	25	84
Two half-day classes	8	64	25	86
One half-day class	7	55	16	78
Major in early childhood education				
Yes	11	59	25	85
No	9	61	22	82
Member of early childhood education professional association				
Yes	8	60	23	84
No	11	60	24	83
Number of early childhood education courses				
Less than 5	9	62	21	79
5 to 9	8	61	24	83
10 or more	13	58	26	85
Race/ethnicity				
White, non-Hispanic	9	60	21	84
Black, non-Hispanic	30	69	46	81
All other races	9	54	25	79

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 3a--Standard errors of the percentage of public school kindergarten teachers indicating various qualities are very important or essential (4 or 5 on the rating scale) for kindergarten readiness, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Is physically healthy, rested, well nourished	Finishes tasks	Can count to 20 or more	Takes turns and shares
All public school kindergarten teachers.....	0.6	1.5	0.8	1.4
School enrollment size				
Less than 500 .....	0.8	1.6	1.1	2.0
500 to 749 .....	1.1	2.6	1.3	2.9
750 or more.....	1.2	3.2	1.7	2.9
School kindergarten enrollment				
Less than 60 .....	1.1	3.0	1.6	3.6
60 to 99 .....	1.1	2.2	1.2	2.5
100 or more.....	0.9	2.5	1.5	2.3
Kindergarten class size				
Less than 20 .....	0.9	2.6	1.6	3.2
20 to 25 .....	0.9	2.1	1.0	1.8
25 or more.....	1.4	3.2	1.2	3.4
Metropolitan status				
City.....	1.1	2.6	1.8	2.7
Urban fringe .....	1.1	2.6	1.4	2.7
Town.....	1.1	3.2	1.3	3.0
Rural.....	1.2	3.3	1.4	3.4
Region				
Northeast.....	1.3	2.3	1.9	3.1
Central.....	1.3	2.9	2.0	3.1
Southeast.....	1.4	3.3	1.0	3.0
West.....	0.8	2.4	1.5	2.6
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	0.7	1.9	1.6	3.0
20 to 49 .....	1.2	2.5	0.9	2.2
50 or more.....	1.0	2.6	1.2	2.5
Percentage minority enrollment in class				
Less than 10 .....	1.0	2.4	1.2	2.5
10 to 49 .....	0.9	2.3	1.2	2.3
50 or more.....	1.1	2.4	1.5	2.7

Table 3a.—Standard errors of the percentage of public school kindergarten teachers indicating various qualities are very important or essential (4 or 5 on the rating scale) for kindergarten readiness, by school and teacher characteristics: United States, 1993.—Continued

School and teacher characteristic	Is physically healthy, rested, well nourished	Finishes tasks	Can count to 20 or more	Takes turns and shares
<b>Years teaching kindergarten</b>				
Less than 5 .....	1.0	2.2	1.4	2.8
5 to 10 .....	0.9	2.8	1.2	2.6
11 or more.....	1.0	2.5	1.3	2.3
<b>Teaching assignment</b>				
Full-day class .....	0.8	2.2	1.1	1.9
Two half-day classes .....	1.2	1.8	1.6	2.0
One half-day class .....	1.1	3.3	2.1	4.2
<b>Major in early childhood education</b>				
Yes.....	0.7	2.0	1.1	1.7
No.....	0.8	2.1	1.0	2.3
<b>Member of early childhood education professional association</b>				
Yes.....	0.8	3.4	1.4	1.9
No.....	0.7	1.4	0.9	2.0
<b>Number of early childhood education professional courses</b>				
Less than 5 .....	0.9	2.7	1.2	2.7
5 to 9 .....	1.2	2.6	1.5	2.8
10 or more.....	0.8	2.2	1.2	2.0
<b>Race/ethnicity</b>				
White, non-Hispanic.....	0.6	1.5	0.8	1.6
Black, non-Hispanic.....	3.0	6.6	5.2	3.7
All other races .....	0.9	5.6	2.6	4.3

Table 3a.--Standard errors of the percentage of public school kindergarten teachers indicating various qualities are very important or essential (4 or 5 on the rating scale) for kindergarten readiness, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Has good problem solving skills	Is enthusiastic and curious in approaching new activities	Is able to use pencil or paint brushes
All public school kindergarten teachers.....	1.5	1.7	1.3
School enrollment size			
Less than 500 .....	1.9	2.2	1.4
500 to 749 .....	2.1	2.8	2.2
750 or more.....	3.3	3.2	2.5
School kindergarten enrollment			
Less than 60 .....	2.8	2.7	2.5
60 to 99 .....	2.2	2.6	2.1
100 or more.....	2.7	2.5	2.0
Kindergarten class size			
Less than 20 .....	2.5	2.3	2.4
20 to 25 .....	2.2	2.5	2.0
26 or more.....	2.3	3.0	2.1
Metropolitan status			
City.....	2.0	2.3	2.3
Urban fringe.....	2.2	3.3	2.6
Town.....	3.2	2.7	2.5
Rural.....	3.1	3.2	2.4
Region			
Northeast.....	2.5	3.1	2.6
Central.....	2.9	3.3	2.7
Southeast.....	2.2	2.4	2.7
West.....	3.0	2.4	1.8
Percentage of students in school eligible for free or reduced-price lunches			
Less than 20 .....	2.7	3.0	1.9
20 to 49 .....	2.1	2.6	2.0
50 or more.....	2.1	2.6	2.0
Percentage minority enrollment in class			
Less than 10 .....	2.5	2.1	1.9
10 to 49 .....	2.2	2.7	1.6
50 or more.....	2.1	3.1	2.4

Table 3a.--Standard errors of the percentage of public school kindergarten teachers indicating various qualities are very important or essential (4 or 5 on the rating scale) for kindergarten readiness, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Has good problem solving skills	Is enthusiastic and curious in approaching new activities	Is able to use pencil or paint brushes
<b>Years teaching kindergarten</b>			
Less than 5	2.1	2.1	2.5
5 to 10	2.7	2.8	2.4
11 or more	2.0	2.2	2.4
<b>Teaching assignment</b>			
Full-day class	1.9	1.9	2.2
Two half-day classes	2.6	2.6	2.8
One half-day class	3.1	3.1	2.9
<b>Major in early childhood education</b>			
Yes	1.9	1.8	1.9
No	2.0	2.4	1.5
<b>Member of early childhood education professional association</b>			
Yes	2.7	2.4	2.1
No	1.7	1.7	1.5
<b>Number of early childhood education courses</b>			
Less than 5	2.3	2.5	1.7
5 to 9	2.3	1.8	2.4
10 or more	2.1	2.2	2.0
<b>Race/ethnicity</b>			
White, non-Hispanic	1.7	1.8	1.3
Black, non-Hispanic	5.1	5.5	5.7
All other races	3.8	3.6	3.4

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Table 3a.--Standard errors of the percentage of public school kindergarten teachers indicating various qualities are very important or essential (4 or 5 on the rating scale) for kindergarten readiness, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Is not disruptive of the class	Knows the English language	Is sensitive to other children's feelings	Sits still and pays attention
All public school kindergarten teachers.....	1.3	1.6	1.5	1.1
School enrollment size				
Less than 500 .....	2.0	2.4	2.1	2.0
500 to 749 .....	2.3	2.9	2.5	2.2
750 or more.....	3.2	2.6	3.4	2.9
School kindergarten enrollment				
Less than 60 .....	3.2	3.1	3.5	2.7
60 to 99 .....	2.7	2.8	2.2	2.2
100 or more.....	2.2	2.3	2.5	2.4
Kindergarten class size				
Less than 20 .....	3.0	2.7	3.3	2.7
20 to 25 .....	2.2	2.0	2.6	2.0
26 or more.....	2.5	2.6	2.5	3.2
Metropolitan status				
City.....	3.1	2.6	2.3	2.7
Urban fringe .....	2.6	2.6	3.3	2.2
Town.....	2.5	3.3	3.0	2.7
Rural.....	3.2	3.9	4.0	3.3
Region				
Northeast.....	3.0	3.3	3.8	3.4
Central.....	2.7	2.8	3.7	3.0
Southeast.....	3.0	3.7	2.9	2.9
West.....	2.5	2.4	3.4	2.3
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	2.1	2.7	3.6	3.1
20 to 49 .....	2.0	2.2	2.3	2.2
50 or more.....	3.1	2.5	2.2	2.5
Percentage minority enrollment in class				
Less than 10 .....	2.1	2.3	2.9	2.3
10 to 49 .....	2.0	2.3	2.6	2.2
50 or more.....	3.0	2.6	2.1	2.6

Table 3a--Standard errors of the percentage of public school kindergarten teachers indicating various qualities are very important or essential (4 or 5 on the rating scale) for kindergarten readiness, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Is not disruptive of the class	Knows the English language	Is sensitive to other children's feelings	Sits still and pays attention
Years teaching kindergarten				
Less than 5 .....	2.2	3.1	2.4	1.7
5 to 10 .....	2.6	2.7	3.3	2.3
11 or more.....	2.3	2.6	2.6	2.6
Teaching assignment				
Full-day class.....	2.2	2.8	1.9	1.7
Two half-day classes .....	2.5	2.8	2.9	2.2
One half-day class.....	4.1	3.1	4.2	2.8
Major in early childhood education				
Yes.....	2.3	1.9	1.9	1.9
No.....	1.8	2.4	2.2	2.0
Member of early childhood education professional association				
Yes.....	2.8	2.6	2.6	2.7
No.....	1.6	1.7	2.0	1.4
Number of early childhood education courses				
Less than 5 .....	2.6	2.3	2.5	2.2
5 to 9 .....	3.2	2.7	2.6	2.4
10 or more.....	2.6	2.2	2.4	2.2
Race/ethnicity				
White, non-Hispanic.....	1.3	1.8	1.8	1.2
Black, non-Hispanic.....	5.0	6.4	4.8	4.3
All other races.....	4.3	5.9	5.0	4.5

Table 3a.—Standard errors of the percentage of public school kindergarten teachers indicating various qualities are very important or essential (4 or 5 on the rating scale) for kindergarten readiness, by school and teacher characteristics: United States, 1993—Continued

School and teacher characteristic	Knows the letters of the alphabet	Can follow directions	Identifies primary colors and basic shapes	Communicates needs, wants, and thoughts verbally in child's primary language
All public school kindergarten teachers.....	0.8	1.4	1.1	1.1
School enrollment size				
Less than 500 .....	1.0	2.2	1.5	1.6
500 to 749 .....	1.4	2.0	2.1	1.6
750 or more.....	1.3	3.5	2.1	2.3
School kindergarten enrollment				
Less than 60 .....	1.8	3.0	2.6	2.3
60 to 99 .....	1.7	2.7	2.0	1.7
100 or more.....	1.1	2.6	1.9	1.5
Kindergarten class size				
Less than 20 .....	1.6	3.2	2.1	2.1
20 to 25 .....	1.2	1.4	1.9	1.6
26 or more.....	1.8	3.5	2.2	1.8
Metropolitan status				
City.....	1.7	3.1	2.0	1.6
Urban fringe .....	1.2	3.1	2.8	1.8
Town.....	1.4	2.9	2.7	1.7
Rural.....	1.7	3.4	2.4	3.0
Region				
Northeast.....	2.2	3.2	3.6	2.6
Central.....	1.9	3.5	2.4	2.9
Southeast.....	1.5	2.8	2.8	1.9
West.....	1.5	2.6	1.9	1.9
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	1.6	2.9	2.7	2.5
20 to 49 .....	1.5	2.1	2.2	1.8
50 or more.....	1.3	2.8	2.0	1.9
Percentage minority enrollment in class				
Less than 10 .....	1.5	2.2	2.0	2.3
10 to 49 .....	1.3	2.3	2.0	1.6
50 or more.....	1.9	2.8	2.3	2.1

Table 3a.-Standard errors of the percentage of public school kindergarten teachers indicating various qualities are very important or essential (4 or 5 on the rating scale) for kindergarten readiness, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Knows the letters of the alphabet	Can follow directions	Identifies primary colors and basic shapes	Communicates needs, wants, and thoughts verbally in child's primary language
Years teaching kindergarten				
Less than 5 .....	1.8	2.3	1.8	2.2
5 to 10 .....	1.4	2.7	2.5	1.3
11 or more .....	1.3	2.6	1.9	2.2
Teaching assignment				
Full-day class .....	1.2	2.1	2.0	1.4
Two half-day classes .....	1.6	2.6	2.6	1.8
One half-day class .....	1.9	4.0	2.6	2.7
Major in early childhood education				
Yes .....	1.0	1.5	1.5	1.3
No .....	1.3	2.4	1.5	1.5
Member of early childhood education professional association				
Yes .....	1.3	2.9	2.3	2.2
No .....	0.9	1.8	1.3	1.3
Number of early childhood education courses				
Less than 5 .....	1.5	2.9	1.7	2.2
5 to 9 .....	1.8	3.1	2.5	1.7
10 or more .....	1.3	1.8	1.2	1.8
Race/ethnicity				
White, non-Hispanic .....	0.9	1.5	1.2	1.3
Black, non-Hispanic .....	5.4	3.8	4.4	4.5
All other races .....	2.9	4.9	4.3	4.2

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 4--Percentage of public school kindergarten teachers indicating extent of agreement with various beliefs about school readiness: United States, 1993

View of readiness	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Attending preschool is very important for success in kindergarten.....	4	13	30	29	24
Children who begin formal reading and math instruction in preschool (nursery or prekindergarten) will do better in elementary school.....	19	27	24	18	13
Parents should make sure that their children know the alphabet before they start kindergarten.....	16	29	29	18	8
If a child appears unready for kindergarten, I would suggest he or she wait a year before enrolling.....	9	18	18	25	30
Children with readiness problems should enter school as soon as they are eligible so they can be exposed to the things they need.....	7	17	20	31	25
Readiness comes as children grow and mature; you can't push it.....	1	4	7	32	56
I can enhance children's readiness by providing experiences they need to build important skills.....	*	2	4	29	65
Parents should set aside time every day for their kindergarten children to practice schoolwork.....	11	22	18	24	25
Homework should be given in kindergarten almost every day.....	44	28	10	11	8
I assume that by the end of the kindergarten year all children will be ready for first grade.....	25	34	15	20	6
I hesitate to send children to first grade if I feel they are not ready for the demands that they will meet there.....	3	10	16	39	32
I communicate with the first grade teachers so they can proceed from where I have left off.....	1	3	11	40	45
Parents should read to their children and play counting games at home regularly.....	*	*	*	10	89
Most children should learn to read in kindergarten.....	26	36	23	11	4
The best way to learn how to read is to practice matching letters and sounds over and over.....	34	33	18	11	3
One of the best ways to help children learn to read is by reading to them.....	*	1	2	16	81
Kindergarten children should not be given reading instruction unless they show an interest.....	11	27	18	26	18

\* = Less than 0.5 percent.

NOTE: Percentages may not add to 100 because of rounding.

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 4a--Standard errors of the percentage of public school kindergarten teachers indicating extent of agreement with various beliefs about school readiness: United States, 1993

View of readiness	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Attending preschool is very important for success in kindergarten.....	0.5	0.8	1.1	1.2	1.2
Children who begin formal reading and math instruction in preschool (nursery or prekindergarten) will do better in elementary school.....	1.0	1.4	1.2	1.2	1.0
Parents should make sure that their children know the alphabet before they start kindergarten.....	1.3	1.7	1.3	1.0	1.0
If a child appears unready for kindergarten, I would suggest he or she wait a year before enrolling.....	0.9	1.1	1.4	1.6	1.7
Children with readiness problems should enter school as soon as they are eligible so they can be exposed to the things they need.....	0.8	1.0	1.1	1.1	1.4
Readiness comes as children grow and mature; you can't push it.....	0.3	0.4	0.7	1.3	1.6
I can enhance children's readiness by providing experiences they need to build important skills.....	—	0.4	0.6	1.4	1.4
Parents should set aside time every day for their kindergarten children to practice schoolwork.....	0.9	1.0	1.1	1.2	1.3
Homework should be given in kindergarten almost every day.....	1.3	1.6	0.8	1.0	0.9
I assume that by the end of the kindergarten year all children will be ready for first grade.....	1.4	1.6	1.1	1.1	0.8
I hesitate to send children to first grade if I feel they are not ready for the demands that they will meet there.....	0.4	0.9	1.4	1.5	1.6
I communicate with the first grade teachers so they can proceed from where I have left off.....	0.2	0.6	0.8	1.5	1.7
Parents should read to their children and play counting games at home regularly.....	—	—	—	0.8	1.0
Most children should learn to read in kindergarten.....	1.2	1.7	1.4	1.0	0.6
The best way to learn how to read is to practice matching letters and sounds over and over.....	1.3	1.3	1.1	0.9	0.5
One of the best ways to help children learn to read is by reading to them.....	—	0.7	2.0	1.1	1.3
Kindergarten children should not be given reading instruction unless they show an interest.....	1.1	1.2	1.1	1.4	1.6

— Estimate of standard error is not derived because it is based on a statistic estimated at less than 0.5 percent or at 100 percent.

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 5.-Percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Attending preschool is very important for success in kindergarten	Children who begin formal reading and math instruction in preschool will do better in elementary school	Parents should make sure that their children know the alphabet before they start kindergarten	If a child appears unready for kindergarten, I would suggest he or she wait a year before enrolling
All public school kindergarten teachers.....	53	30	27	55
School enrollment size				
Less than 500 .....	52	30	25	57
500 to 749 .....	50	28	25	57
750 or more.....	61	35	33	49
School kindergarten enrollment				
Less than 60 .....	53	31	23	60
60 to 99 .....	52	31	27	55
100 or more.....	54	29	29	52
Kindergarten class size				
Less than 20 .....	50	33	27	57
20 to 25 .....	54	31	30	57
25 or more.....	55	26	22	49
Metropolitan status				
City.....	64	39	36	50
Urban fringe.....	51	24	24	56
Town.....	48	26	24	56
Rural.....	42	28	21	64
Region				
Northeast.....	44	22	29	55
Central.....	51	27	25	62
Southeast.....	58	40	29	50
West.....	56	29	24	57
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	40	18	19	66
20 to 49 .....	51	25	23	54
50 or more.....	63	43	34	45
Percentage minority enrollment in class				
Less than 10 .....	42	24	23	63
10 to 49 .....	51	25	22	59
50 or more.....	68	44	36	42

Table 5--Percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993 -- Continued

School and teacher characteristic	Attending preschool is very important for success in kindergarten	Children who begin formal reading and math instruction in preschool will do better in elementary school	Parents should make sure that their children know the alphabet before they start kindergarten	If a child appears unready for kindergarten, I would suggest he or she wait a year before enrolling
Years teaching kindergarten				
Less than 5	57	38	37	56
5 to 10	51	26	24	56
11 or more	51	27	20	54
Teaching assignment				
Full-day class	55	35	29	52
Two half-day classes	50	25	27	60
One half-day class	52	25	21	59
Major in early childhood education				
Yes	54	34	26	53
No	52	26	27	58
Member of early childhood education professional association				
Ycs	55	25	23	53
No	52	32	28	56
Number of early childhood education courses				
Less than 5	52	29	30	57
5 to 9	53	29	27	56
10 or more	55	32	23	53
Race/ethnicity				
White, non-Hispanic	50	26	24	59
Black, non-Hispanic	74	67	57	28
All other races	74	40	25	46

Table 5.-Percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993 -- Continued

School and teacher characteristic	Children with readiness problems should enter school as soon as they are eligible so they can be exposed to the things they need	Readiness comes as children grow and mature; you can't push it	I can enhance children's readiness by providing experiences they need to build important skills	Parents should set aside time every day for their kindergarten children to practice schoolwork
All public school kindergarten teachers.....	56	88	94	49
School enrollment size				
Less than 500 .....	57	88	94	43
500 to 749 .....	55	88	94	48
750 or more.....	58	55	95	63
School kindergarten enrollment				
Less than 60 .....	58	89	94	47
60 to 99 .....	56	88	94	47
100 or more.....	57	88	95	51
Kindergarten class size				
Less than 20 .....	60	88	94	48
20 to 25 .....	58	88	94	47
26 or more.....	50	88	94	52
Metropolitan status				
City.....	63	85	96	58
Urban fringe .....	49	90	91	48
Town.....	54	90	96	39
Rural.....	58	89	94	45
Region				
Northeast.....	59	91	93	43
Central.....	57	83	94	39
Southeast.....	60	88	96	54
West.....	52	90	93	53
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	43	91	92	32
20 to 49 .....	54	86	93	43
50 or more.....	67	88	97	64
Percentage minority enrollment in class				
Less than 10 .....	52	88	93	38
10 to 49 .....	53	90	94	41
50 or more.....	66	87	96	69

Table 5.--Percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993 -- Continued

School and teacher characteristic	Children with readiness problems should enter school as soon as they are eligible so they can be exposed to the things they need	Readiness comes as children grow and mature; you can't push it	I can enhance children's readiness by providing experiences they need to build important skills	Parents should set aside time every day for their kindergarten children to practice schoolwork
Years teaching kindergarten				
Less than 5	55	88	94	57
5 to 10	57	88	94	46
11 or more	58	89	95	43
Teaching assignment				
Full-day class	61	88	96	52
Two half-day classes	54	87	92	39
One half-day class	48	91	93	52
Major in early childhood education				
Yes	61	88	95	50
No	52	88	93	47
Member of early childhood education professional association				
Yes	60	91	95	41
No	55	87	94	52
Number of early childhood education courses				
Less than 5	49	86	94	52
5 to 9	58	92	94	48
10 or more	63	88	95	46
Race/ethnicity				
White, non-Hispanic	54	88	94	46
Black, non-Hispanic	76	86	95	68
All other races	63	90	96	65

Table 5.--Percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993 -- Continued

School and teacher characteristic	Homework should be given in kindergarten almost every day	I assume that by the end of the kindergarten year all children will be ready for first grade	I hesitate to send children to first grade if I feel they are not ready for the demands that they will meet there	I communicate with the first grade teachers so they can proceed from where I have left off
All public school kindergarten teachers.....	19	27	70	85
School enrollment size				
Less than 500 .....	14	28	70	86
500 to 749 .....	18	20	72	85
750 or more.....	33	34	70	86
School kindergarten enrollment				
Less than 60 .....	18	27	74	90
60 to 99 .....	16	26	72	86
100 or more.....	23	26	67	83
Kindergarten class size				
Less than 20 .....	16	27	74	87
20 to 25 .....	15	25	71	84
26 or more.....	32	29	67	87
Metropolitan status				
City.....	33	32	66	85
Urban fringe.....	17	25	72	84
Town.....	10	25	69	87
Rural.....	9	22	79	87
Region				
Northeast.....	22	24	72	86
Central.....	11	26	66	89
Southeast.....	19	28	79	84
West.....	23	27	66	84
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	13	23	67	85
20 to 49 .....	13	25	73	87
50 or more.....	29	20	70	84
Percentage minority enrollment in class				
Less than 10 .....	10	21	73	87
10 to 49 .....	15	28	73	86
50 or more.....	34	31	66	83

Table 5.--Percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993 -- Continued

School and teacher characteristic	Homework should be given in kindergarten almost every day	I assume that by the end of the kindergarten year all children will be ready for first grade	I hesitate to send children to first grade if I feel they are not ready for the demands that they will meet there	I communicate with the first grade teachers so they can proceed from where I have left off
Years teaching kindergarten				
Less than 5	21	31	70	84
5 to 10	17	22	70	84
11 or more	19	27	71	89
Teaching assignment				
Full-day class	21	27	72	85
Two half-day classes	12	24	70	86
One half-day class	26	28	66	87
Major in early childhood education				
Yes	17	28	73	87
No	22	25	67	84
Member of early childhood education professional association				
Yes	20	26	68	87
No	19	27	72	85
Number of early childhood education courses				
Less than 5	22	27	67	81
5 to 9	16	26	75	88
10 or more	18	26	71	87
Race/ethnicity				
White, non-Hispanic	15	24	71	86
Black, non-Hispanic	41	39	71	88
All other races	40	42	61	79

Table 5.--Percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993 - Continued

School and teacher characteristic	Parents should read to their children and play counting games at home regularly	Most children should learn to read in kindergarten	The best way to learn to read is to practice matching letters and sounds over and over
All public school kindergarten teachers.....	99	15	14
School enrollment size			
Less than 500 .....	99	14	15
500 to 749 .....	99	13	11
750 or more.....	100	20	18
School kindergarten enrollment			
Less than 60 .....	99	16	18
60 to 99 .....	99	14	13
100 or more.....	99	15	14
Kindergarten class size			
Less than 20 .....	99	18	15
20 to 25 .....	99	16	15
26 or more.....	99	10	11
Metropolitan status			
City.....	100	20	18
Urban fringe.....	99	9	11
Town.....	99	13	14
Rural.....			
Region			
Northeast.....	100	16	16
Central.....	99	13	12
Southeast.....	99	17	19
West.....	99	13	12
Percentage of students in school eligible for free or reduced-price lunches			
Less than 20 .....	100	8	8
20 to 49 .....	99	13	12
50 or more.....	99	21	21
Percentage minority enrollment in class			
Less than 10 .....	98	12	12
10 to 49 .....	100	14	12
50 or more.....	100	20	20

Table 5--Percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993 -- Continued

School and teacher characteristic	Parents should read to their children and play counting games at home regularly	Most children should learn to read in kindergarten	The best way to learn to read is to practice matching letters and sounds over and over
<b>Years teaching kindergarten</b>			
Less than 5.....	99	17	15
5 to 10.....	99	14	13
11 or more.....	99	13	15
<b>Teaching assignment</b>			
Full-day class.....	99	19	18
Two half-day classes.....	99	11	12
One half-day class.....	99	9	7
<b>Major in early childhood education</b>			
Yes.....	100	17	16
No.....	98	13	12
<b>Member of early childhood education professional association</b>			
Yes.....	99	13	14
No.....	99	16	15
<b>Number of early childhood education courses</b>			
Less than 5.....	99	14	14
5 to 9.....	100	16	15
10 or more.....	99	15	15
<b>Race/ethnicity</b>			
White, non-Hispanic.....	99	12	12
Black, non-Hispanic.....	100	39	45
All other races.....	99	19	11

Table 5.-Percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993 -- Continued

School and teacher characteristic	One of the best ways to help children learn to read is by reading to them	Kindergarten children should not be given reading instruction unless they show an interest
All public school kindergarten teachers.....	97	44
School enrollment size		
Less than 500 .....	97	43
500 to 749 .....	97	46
750 or more.....	98	45
School kindergarten enrollment		
Less than 60 .....	98	44
60 to 99 .....	96	45
100 or more.....	98	44
Kindergarten class size		
Less than 20 .....	97	43
20 to 25 .....	98	44
26 or more.....	96	45
Metropolitan status		
City.....	98	38
Urban fringe .....	97	39
Town.....	98	55
Rural.....	96	48
Region		
Northeast.....	99	45
Central.....	99	39
Southeast.....	96	47
West.....	96	44
Percentage of students in school eligible for free or reduced-price lunches		
Less than 20 .....	97	47
20 to 49 .....	98	46
50 or more.....	97	40
Percentage minority enrollment in class		
Less than 10 .....	98	47
10 to 49 .....	97	49
50 or more.....	96	36

Table 5.--Percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	One of the best ways to help children learn to read is by reading to them	Kindergarten children should not be given reading instruction unless they show an interest
<b>Years teaching kindergarten</b>		
Less than 5 .....	96	38
5 to 10 .....	98	44
11 or more .....	98	50
<b>Teaching assignment</b>		
Full-day class .....	97	44
Two half-day classes .....	98	43
One half-day class .....	98	47
<b>Major in early childhood education</b>		
Yes .....	97	46
No .....	97	42
<b>Member of early childhood education professional association</b>		
Yes .....	98	47
No .....	97	43
<b>Number of early childhood education courses</b>		
Less than 5 .....	96	40
5 to 9 .....	98	47
10 or more .....	98	46
<b>Race/ethnicity</b>		
White, non-Hispanic .....	98	45
Black, non-Hispanic .....	94	37
All other races .....	95	39

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 5a.—Standard errors of the percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Attending preschool is very important for success in kindergarten	Children who begin formal reading and math instruction in preschool will do better in elementary school	Parents should make sure that their children know the alphabet before they start kindergarten	If a child appears unready for kindergarten, I would suggest he or she wait a year before enrolling
All public school kindergarten teachers.....	1.3	1.5	1.4	2.1
School enrollment size				
Less than 500 .....	1.7	2.1	1.4	2.8
500 to 749 .....	2.0	2.5	2.4	2.8
750 or more.....	2.7	3.3	3.1	3.2
School kindergarten enrollment				
Less than 60 .....	2.1	3.0	2.7	3.3
60 to 99 .....	2.9	2.7	2.5	3.0
100 or more.....	2.2	2.5	2.4	2.6
Kindergarten class size				
Less than 20 .....	2.3	2.8	2.4	4.0
20 to 25 .....	2.1	2.6	2.2	2.7
25 or more.....	3.4	1.8	2.1	2.8
Metropolitan status				
City.....	2.5	2.7	2.5	2.8
Urban fringe .....	2.9	2.9	2.7	3.5
Town.....	2.2	3.2	2.8	4.2
Rural.....	2.6	3.0	2.8	3.8
Region				
Northeast.....	3.1	2.6	3.2	4.6
Central.....	3.5	3.1	2.6	3.6
Southeast.....	2.1	2.7	2.6	2.9
West .....	2.9	2.7	2.6	3.3
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	2.7	1.6	2.6	3.2
20 to 49 .....	2.4	2.6	2.2	3.4
50 or more.....	2.4	2.7	1.8	3.1
Percentage minority enrollment in class				
Less than 10 .....	2.3	2.1	2.3	3.0
10 to 49 .....	2.7	2.0	2.4	2.9
50 or more.....	2.0	3.0	1.9	3.4

Table 5a.--Standard errors of the percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993 -- Continued

School and teacher characteristic	Attending preschool is very important for success in kindergarten	Children who begin formal reading and math instruction in preschool will do better in elementary school	Parents should make sure that their children know the alphabet before they start kindergarten	If a child appears unready for kindergarten, I would suggest he or she wait a year before enrolling
Years teaching kindergarten				
Less than 5 .....	2.8	2.8	2.5	2.9
5 to 10 .....	2.3	2.6	2.0	3.0
11 or more.....	2.5	2.5	1.6	3.4
Teaching assignment				
Full-day class .....	1.7	2.2	2.1	2.4
Two half-day classes .....	2.6	2.5	2.7	3.1
One half-day class .....	3.8	2.3	3.0	3.8
Major in early childhood education				
Yes .....	1.7	2.2	1.8	2.5
No.....	1.6	2.3	2.1	2.7
Member of early childhood education professional association				
Yes .....	1.8	2.5	2.2	3.4
No.....	1.7	1.9	1.6	2.2
Number of early childhood education courses				
Less than 5 .....	2.2	2.6	2.3	2.8
5 to 9 .....	3.2	2.1	2.8	3.0
10 or more.....	1.8	2.2	2.1	2.7
Race/ethnicity				
White, non-Hispanic.....	1.4	1.3	1.5	2.1
Black, non-Hispanic.....	4.7	5.8	6.6	5.6
All other races.....	4.1	4.8	4.7	5.9

Table 5a.-Standard errors of the percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993 -- Continued

School and teacher characteristic	Children with readiness problems should enter school as soon as they are eligible so they can be exposed to the things they need	Readiness comes as children grow and mature; you can't push it	I can enhance children's readiness by providing experiences they need to build important skills	Parents should set aside time every day for their kindergarten children to practice schoolwork
All public school kindergarten teachers.....	1.2	0.9	0.8	1.3
School enrollment size				
Less than 500 .....	2.0	1.4	0.9	1.8
500 to 749 .....	2.5	1.6	1.4	2.6
750 or more.....	3.4	2.3	1.5	2.9
School kindergartener enrollment				
Less than 60 .....	2.6	1.5	1.7	4.1
60 to 99 .....	2.5	1.7	1.5	2.6
100 or more.....	1.9	1.3	1.4	2.1
Kindergarten class size				
Less than 20 .....	3.0	1.9	1.2	3.3
20 to 25 .....	2.0	1.4	1.1	1.9
26 or more.....	3.1	1.6	1.4	3.0
Metropolitan status				
City.....	2.0	2.1	0.9	3.0
Urban fringe .....	2.7	2.4	1.8	2.9
Town.....	2.7	1.8	1.2	3.2
Rural.....	3.6	1.6	1.9	3.5
Region				
Northeast.....	3.3	2.0	1.5	3.2
Central.....	3.2	2.5	1.4	2.9
Southeast.....	2.6	1.6	0.9	2.7
West.....	2.9	1.1	1.7	2.5
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	2.3	1.7	1.8	3.0
20 to 49 .....	2.5	1.7	1.5	2.6
50 or more.....	2.8	1.3	1.1	2.0
Percentage minority enrollment in class				
Less than 10 .....	2.2	1.8	1.3	2.8
10 to 49 .....	2.5	1.3	1.2	2.0
50 or more.....	2.9	1.5	1.0	2.5

Table 5a.--Standard errors of the percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993 -- Continued

School and teacher characteristic	Children with readiness problems should enter school as soon as they are eligible so they can be exposed to the things they need	Readiness comes as children grow and mature; you can't push it	I can enhance children's readiness by providing experiences they need to build important skills	Parents should set aside time every day for their kindergarten children to practice schoolwork
Years teaching kindergarten				
Less than 5 .....	2.2	1.7	1.2	2.8
5 to 10 .....	2.2	1.8	1.6	2.7
11 or more.....	2.1	1.6	1.3	2.2
Teaching assignment				
Full-day class .....	2.0	1.3	0.9	1.6
Two half-day classes .....	2.1	2.0	1.5	2.6
One half-day class .....	3.6	1.9	2.0	3.3
Major in early childhood education				
Yes .....	1.7	1.5	0.9	1.5
No.....	1.6	1.2	1.1	2.2
Member of early childhood education professional association				
Yes .....	2.1	1.8	1.1	2.2
No.....	1.6	1.2	0.9	1.7
Number of early childhood education courses				
Less than 5 .....	1.5	1.7	1.0	2.6
5 to 9 .....	2.5	1.4	1.5	3.2
10 or more.....	2.3	1.5	1.0	1.8
Race/ethnicity				
White, non-Hispanic.....	1.4	1.0	0.9	1.4
Black, non-Hispanic.....	5.7	3.5	2.4	5.3
All other races .....	6.6	2.5	2.3	4.9

Table 5a.-Standard errors of the percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993 -- Continued

School and teacher characteristic	Homework should be given in kindergarten almost every day	I assume that by the end of the kindergarten year all children will be ready for first grade	I hesitate to send children to first grade if I feel they are not ready for the demands that they will meet there	I communicate with the first grade teachers so they can proceed from where I have left off
All public school kindergarten teachers.....	1.0	1.4	1.5	1.0
School enrollment size				
Less than 500 .....	1.6	2.4	2.0	1.6
500 to 749 .....	2.2	2.0	2.2	1.9
750 or more.....	3.2	2.6	3.1	2.4
School kindergarten enrollment				
Less than 60 .....	2.8	2.5	2.6	1.8
60 to 99 .....	1.6	2.6	2.2	1.8
100 or more.....	1.8	2.2	1.9	1.9
Kindergarten class size				
Less than 20 .....	2.6	2.5	3.4	2.1
20 to 25 .....	1.3	1.8	2.4	1.7
26 or more.....	2.7	2.3	2.9	1.6
Metropolitan status				
City.....	2.2	2.0	2.7	2.0
Urban fringe .....	1.9	1.9	3.0	1.7
Town.....	1.7	2.5	2.5	1.6
Rural.....	2.3	3.0	3.2	2.5
Region				
Northeast.....	2.8	2.6	3.1	2.3
Central.....	2.2	2.8	3.2	2.0
Southeast.....	2.7	2.7	2.4	2.3
West.....	1.9	2.2	2.2	2.4
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	2.0	2.8	2.8	1.9
20 to 49 .....	1.7	2.2	2.2	1.6
50 or more.....	1.7	2.0	2.5	1.9
Percentage minority enrollment in class				
Less than 10 .....	1.7	1.9	2.7	1.6
10 to 49 .....	1.1	2.4	2.5	1.7
50 or more.....	2.4	2.0	3.3	2.3

Table 5a.—Standard errors of the percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993 ... Continued

School and teacher characteristic	Homework should be given in kindergarten almost every day	I assume that by the end of the kindergarten year all children will be ready for first grade	I invite to send children to first grade if I feel they are not ready for the demands that they will meet there	I communicate with the first grade teachers so they can proceed from where I have left off
Years teaching kindergarten				
Less than 5	2.2	2.6	2.4	1.6
5 to 10	1.8	1.7	2.9	1.7
11 or more	1.9	2.6	2.2	1.8
Teaching assignment				
Full-day class	1.2	2.2	2.6	1.6
Two half-day classes	1.9	2.6	2.5	1.5
One half-day class	2.9	2.9	2.7	2.2
Major in early childhood education				
Yes	1.3	2.0	1.8	1.6
No	1.6	2.1	2.1	1.9
Member of early childhood education professional association				
Yes	1.7	2.9	2.1	1.8
No	1.2	1.7	1.8	1.3
Number of early childhood education courses				
Less than 5	2.1	2.1	2.6	1.7
5 to 9	2.5	2.4	2.9	1.5
10 or more	1.3	2.2	2.2	1.3
Race/ethnicity				
White, non-Hispanic	1.1	1.5	1.5	1.0
Black, non-Hispanic	4.6	4.3	5.8	3.2
All other races	4.8	3.6	4.9	4.5

Table 5a.—Standard errors of the percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993 -- Continued

School and teacher characteristic	Parents should read to their children and play, counting games at home regularly	Most children should learn to read in kindergarten	The best way to learn to read is to practice matching letters and sounds over and over
All public school kindergarten teachers.....	0.3	1.3	1.0
School enrollment size			
Less than 500 .....	0.5	1.5	1.5
500 to 749 .....	0.5	2.0	2.0
750 or more.....	0.4	2.8	2.6
School kindergarten enrollment			
Less than 60 .....	0.9	2.6	2.6
60 to 99 .....	0.3	2.1	1.7
100 or more.....	0.3	2.0	1.5
Kindergarten class size			
Less than 20 .....	0.5	2.6	2.1
20 to 25 .....	0.3	1.5	1.5
26 or more.....	0.5	1.9	2.0
Metropolitan status			
City.....	—	2.3	2.1
Urban fringe.....	0.6	1.2	2.2
Town.....	0.5	2.0	1.9
Rural.....	0.9	2.6	1.9
Region			
Northeast.....	0.3	2.6	2.7
Central.....	0.6	1.9	2.2
Southeast.....	0.5	3.0	2.2
West.....	0.5	1.8	2.1
Percentage of students in school eligible for free or reduced-price lunches			
Less than 20 .....	0.3	1.7	1.6
20 to 49 .....	0.4	2.0	1.3
50 or more.....	0.4	2.1	2.0
Percentage minority enrollment in class			
Less than 10 .....	0.6	1.7	1.6
10 to 49 .....	0.4	2.2	1.9
50 or more.....	0.3	2.1	2.0

Table 5a.--Standard errors of the percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993 -- Continued

School and teacher characteristic	Parents should read to their children and play counting games at home regularly	Most children should learn to read in kindergarten	The best way to learn to read is to practice matching letters and sounds over and over
Years teaching kindergarten			
Less than 5	0.4	2.5	1.7
5 to 10	0.4	1.9	1.5
11 or more	0.5	1.4	1.8
Teaching assignment			
Full-day class	0.3	2.1	1.6
Two half-day classes	0.4	1.8	1.9
One half-day class	0.7	2.1	1.8
Major in early childhood education			
Yes	0.2	1.7	1.5
No	0.6	1.4	1.2
Member of early childhood education professional association			
Yes	0.7	1.7	1.7
No	0.3	1.5	1.0
Number of early childhood education courses			
Less than 5	0.6	1.9	1.8
5 to 9	—	2.6	1.9
10 or more	0.4	2.2	1.7
Race/ethnicity			
White, non-Hispanic	0.3	1.3	1.0
Black, non-Hispanic	0.0	6.6	6.2
All other races	1.0	3.7	3.4

Table 5a--Standard errors of the percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993 -- Continued

School and teacher characteristic	One of the best ways to help children learn to read is by reading to them	Kindergarten children should not be given reading instruction unless they show an interest
All public school kindergarten teachers.....	0.4	1.6
School enrollment size		
Less than 500 .....	0.7	2.1
500 to 749 .....	0.8	2.5
750 or more.....	0.9	3.6
School kindergarten enrollment		
Less than 60 .....	0.9	2.5
60 to 99 .....	1.0	2.3
100 or more.....	0.5	2.5
Kindergarten class size		
Less than 20 .....	0.9	3.5
20 to 25.....	0.6	2.0
26 or more.....	1.1	2.4
Metropolitan status		
City.....	0.7	2.7
Urban fringe .....	0.8	3.8
Town.....	0.8	3.0
Rural.....	1.3	3.2
Region		
Northeast.....	0.7	2.7
Central.....	0.7	2.5
Southeast.....	0.9	3.6
West.....	0.8	2.4
Percentage of students in school eligible for free or reduced-price lunches		
Less than 20 .....	0.8	2.8
20 to 49 .....	0.6	2.1
50 or more.....	0.8	2.7
Percentage minority enrollment in class		
Less than 10 .....	0.6	2.5
10 to 49 .....	0.6	3.0
50 or more.....	0.9	2.3

Table 5a.--Standard errors of the percentage of public school kindergarten teachers indicating they agree or strongly agree (4 or 5 on the rating scale) with various views of school readiness, by school and teacher characteristics: United States, 1993 -- Continued

School and teacher characteristic	One of the best ways to help children learn to read is by reading to them	Kindergarten children should not be given reading instruction unless they show an interest
<b>Years teaching kindergarten</b>		
Less than 5 .....	0.8	2.7
5 to 10 .....	0.7	2.6
11 or more.....	0.7	2.7
<b>Teaching assignment</b>		
Full-day class .....	0.7	2.1
Two half-day classes .....	0.8	2.8
One half-day class .....	0.8	2.9
<b>Major in early childhood education</b>		
Yes.....	0.5	2.4
No.....	0.6	1.8 <sup>A</sup>
<b>Member of early childhood education professional association</b>		
Yes.....	0.7	2.7
No.....	0.6	1.7
<b>Number of early childhood education courses</b>		
Less than 5 .....	0.9	2.0
5 to 9 .....	0.7	3.1
10 or more .....	0.6	2.3
<b>Race/ethnicity</b>		
White, non-Hispanic.....	0.4	1.6
Black, non-Hispanic.....	2.3	4.5
All other races .....	2.2	5.2

-- Estimate of standard error is not derived because it is based on a statistic estimated at less than 0.5 percent or at 100 percent.

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 6.--Percentage distribution of race/ethnicity of students in public school kindergarten classes, by school and teacher characteristics: United States, 1993

School and teacher characteristic	American Indian/ Alaskan Native	Asian/Pacific Islander	Black, non-Hispanic	Hispanic	White, non-Hispanic	Other
All public school kindergarten students.....	1	3	17	12	66	*
School enrollment size						
Less than 500 .....	2	2	14	8	74	*
500 to 749 .....	1	4	20	11	64	*
750 or more.....	*	5	20	25	49	*
School kindergarten enrollment						
Less than 60 .....	1	3	12	8	76	*
60 to 99 .....	2	3	18	10	67	*
100 or more.....	1	4	19	17	59	*
Kindergarten class size						
Less than 20 .....	2	2	14	11	70	*
20 to 25 .....	1	3	16	9	72	*
26 or more.....	1	5	21	19	54	*
Metropolitan status						
City.....	*	4	30	20	45	*
Urban fringe .....	1	6	11	10	73	*
Town.....	2	2	11	9	78	*
Rural.....	3	*	8	5	83	*
Region						
Northeast.....	2	3	14	9	72	*
Central.....	*	2	16	5	77	*
Southeast.....	*	1	30	5	64	*
West .....	2	7	9	26	56	*
Percentage of students in school eligible for free or reduced-price lunches						
Less than 20 .....	*	4	4	4	87	*
20 to 49 .....	1	3	10	6	80	*
50 or more.....	2	4	34	25	36	*
Percentage minority enrollment in class						
Less than 10 .....	*	1	1	1	97	*
10 to 49 .....	2	4	11	8	75	*
50 or more.....	2	7	43	32	16	*

Table 6.--Percentage distribution of race/ethnicity of students in public school kindergarten classes, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	American Indian/ Alaskan Native	Asian/Pacific Islander	Black, non-Hispanic	Hispanic	White, non-Hispanic	Other
<b>Years teaching kindergarten</b>						
Less than 5	1	4	19	15	61	*
5 to 10	1	4	16	12	67	*
11 or more	1	3	16	10	70	*
<b>Teaching assignment</b>						
Full-day class	1	3	26	12	57	*
Two half-day classes	1	3	10	8	77	*
One half-day class	*	5	10	25	60	*
<b>Major in early childhood education</b>						
Yes	1	3	20	10	66	*
No	1	4	13	16	66	*
<b>Member of early childhood education association</b>						
Yes	1	3	17	10	68	*
No	1	3	17	14	65	*
<b>Number of early childhood education courses</b>						
Less than 5	1	4	15	15	65	*
5 to 9	1	3	14	12	70	*
10 or more	1	3	21	10	65	*
<b>Race/ethnicity</b>						
White, non-Hispanic	1	3	14	9	72	*
Black, non-Hispanic	*	1	60	11	28	*
All other races	2	10	9	56	23	0

\* = Less than 0.5 percent.

NOTE: Percentages may not add to 100 because of rounding.

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 6a.—Standard errors of the percentage distribution of race/ethnicity of students in public school kindergarten classes, by school and teacher characteristics: United States, 1993

School and teacher characteristic	American Indian/ Alaskan Native	Asian/Pacific Islander	Black, non-Hispanic	Hispanic	White, non-Hispanic	Other
All public school kindergarten students.....	0.2	0.4	0.9	0.7	1.0	—
School enrollment size						
Less than 500 .....	0.4	0.5	1.4	0.8	1.6	—
500 to 749 .....	0.4	0.7	1.8	1.4	1.9	—
750 or more.....	—	0.9	2.6	2.7	2.5	—
School kindergarten enrollment						
Less than 60 .....	0.2	0.8	1.5	1.5	2.4	—
60 to 99 .....	0.5	0.6	2.1	1.2	2.3	—
100 or more.....	0.3	0.7	1.1	1.5	1.7	—
Kindergarten class size						
Less than 20 .....	0.8	0.7	2.0	1.4	2.7	—
20 to 25 .....	0.2	0.5	1.2	1.1	1.7	—
26 or more.....	0.3	0.7	2.0	2.2	2.6	—
Metropolitan status						
City .....	—	0.7	2.3	2.1	2.8	—
Urban fringe .....	0.2	0.8	1.8	1.1	1.8	—
Town .....	0.5	0.4	1.4	1.2	1.6	—
Rural .....	1.2	0.1	1.3	1.5	2.4	—
Region						
Northeast .....	0.1	0.5	1.8	1.9	2.5	—
Central .....	—	0.4	2.8	1.1	3.0	—
Southeast .....	—	0.2	2.6	1.1	2.8	—
West .....	0.5	1.0	1.0	1.4	1.7	—
Percentage of students in school eligible for free or reduced-price lunches						
Less than 20 .....	—	0.6	0.6	0.7	1.2	—
20 to 49 .....	0.3	0.5	0.9	0.7	1.4	—
50 or more.....	0.6	0.8	2.1	1.5	1.8	—
Percentage minority enrollment in class						
Less than 10 .....	—	0.1	0.1	0.1	0.2	—
10 to 49 .....	0.3	0.3	0.6	0.5	0.5	—
50 or more.....	0.6	1.7	2.3	1.8	1.0	—

Table 6a.--Standard errors of the percentage distribution of race/ethnicity of students in public school kindergarten classes, by school and teacher characteristics: United States, 1993.. Continued

School and teacher characteristic	American Indian/ Alaskan Native	Asian/Pacific Islander	Black, non-Hispanic	Hispanic	White, non-Hispanic	Other
Years teaching kindergarten						
Less than 5 .....	0.4	0.8	1.6	1.6	1.8	--
5 to 10 .....	0.3	0.6	1.5	1.0	1.4	--
11 or more.....	0.3	0.3	1.5	1.3	2.3	--
Teaching assignment						
Full-day class .....	0.5	0.6	1.6	1.3	1.4	--
Two half-day classes .....	0.3	0.4	1.1	1.0	1.5	--
One half-day class.....	--	0.8	1.7	2.5	3.1	--
Major in early childhood education						
Yes .....	0.3	0.3	1.3	0.9	1.3	--
No.....	0.3	0.6	1.1	1.2	1.3	--
Member of early childhood education association						
Yes .....	0.3	0.5	1.4	1.3	2.1	--
No.....	0.3	0.4	0.9	0.9	1.3	--
Number of early childhood education courses						
Less than 5 .....	0.3	0.8	1.4	1.4	1.2	--
5 to 9 .....	0.5	0.4	1.5	1.6	2.1	--
10 or more.....	0.3	0.3	1.4	0.8	1.6	--
Race/ethnicity						
White, non-Hispanic.....	0.2	0.2	0.9	0.5	1.0	--
Black, non-Hispanic.....	--	0.6	5.0	3.0	4.6	--
All other races.....	0.9	3.2	2.4	5.0	3.6	--

-- Estimate of standard error is not derived because it is based on a statistic estimated at less than 0.5 percent or at 100 percent.

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 7.-Percentage of various types of public school kindergarten classes, mean class size, and mean hours classes meet, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Type of class				Mean class size	Mean number of hours class meets per week
	Regular kindergarten	Transitional kindergarten	1st grade	Multi-grade/ungraded		
All public school kindergarten classes.....	93	1	3	3	22	21
School enrollment size						
Less than 500 .....	92	2	3	4	21	21
500 to 749 .....	95	1	3	1	23	21
750 or more.....	93	1	2	3	24	24
School kindergarten enrollment						
Less than 60 .....	92	1	1	6	20	21
60 to 99 .....	93	1	3	2	22	21
100 or more.....	94	2	3	1	23	23
Kindergarten class size						
Less than 20 .....	81	3	7	9	15	22
20 to 25 .....	98	1	1	*	22	21
26 or more.....	99	1	1	0	29	21
Metropolitan status						
City.....	96	1	1	1	23	22
Urban fringe.....	96	1	2	1	23	19
Town.....	92	2	5	1	21	21
Rural.....	85	1	3	9	18	24
Region						
Northeast.....	91	2	5	2	21	18
Central.....	94	3	2	2	22	17
Southeast.....	93	1	2	5	22	30
West.....	94	*	2	3	23	20
Percentage of students in school eligible for free or reduced-price lunches						
Less than 20 .....	95	1	2	2	22	17
20 to 49 .....	92	2	3	2	22	21
50 or more.....	93	*	2	4	22	25

Table 7.-Percentage of various types of public school kindergarten classes, mean class size, and mean hours classes meet, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Type of class				Mean class size	Mean number of hours class meets per week
	Regular kindergarten	Transitional kindergarten	1st grade	Multigrade/ungraded		
Percentage minority enrollment in class						
Less than 10	91	2	3	4	21	19
10 to 49	95	1	3	2	22	22
50 or more	95	1	2	2	23	25
Years teaching kindergarten						
Less than 5	88	1	5	6	21	22
5 to 10	92	2	4	2	22	22
11 or more	96	*	1	2	23	21
Teaching assignment						
Full-day class	89	1	6	5	21	31
Two half-day classes	97	2	*	*	22	14
One half-day class	96	1	*	3	25	16
Major in early childhood education						
Yes	95	1	2	2	22	23
No	91	2	4	3	22	20
Member of early childhood education professional association						
Yes	94	2	2	1	22	21
No	93	1	3	3	22	22
Number of early childhood education courses						
Less than 5	91	1	4	4	21	21
5 to 9	94	1	3	2	22	21
10 or more	95	2	2	2	23	23
Race/ethnicity						
White, non-Hispanic	93	2	3	2	22	21
Black, non-Hispanic	94	0	2	4	22	28
All other races	92	*	3	5	23	24

\* = Less than 0.5 percent.

NOTE: Percentages may not add to 100 because of rounding.

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 7a--Standard errors of the percentage of various types of public school kindergarten classes, mean class size, and mean hours classes meet, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Type of class				Mean class size	Mean number of hours class meets per week
	Regular kindergarten	Transitional kindergarten	1st grade	Multi-grade/ungraded		
All public school kindergarten classes	0.8	0.3	0.4	0.7	0.2	0.3
School enrollment size						
Less than 500	1.2	0.5	0.6	1.0	0.3	0.4
500 to 749	0.7	0.4	0.4	0.5	0.3	0.7
750 or more	2.5	0.8	0.6	2.3	0.5	0.6
School kindergarten enrollment						
Less than 60	1.8	0.5	0.7	1.7	0.4	0.6
60 to 99	1.2	0.6	0.6	1.0	0.4	0.5
100 or more	0.9	0.5	0.3	0.7	0.3	0.5
Kindergarten class size						
Less than 20	2.4	0.9	1.2	2.3	0.2	0.7
20 to 25	0.6	0.4	0.3	--	0.1	0.4
26 or more	0.5	0.4	0.3	--	0.2	0.5
Metropolitan status						
City	0.9	0.5	0.4	0.6	0.3	0.5
Urban fringe	0.9	0.6	0.6	0.6	0.3	0.4
Town	1.4	0.7	1.0	0.9	0.3	0.6
Rural	2.9	0.7	1.0	2.8	0.5	0.8
Region						
Northeast	1.4	0.8	1.0	0.9	0.5	0.6
Central	1.6	1.0	0.8	0.8	0.3	0.5
Southeast	2.2	0.4	0.5	2.3	0.4	0.5
West	1.0	--	0.6	0.8	0.3	0.6
Percentage of students in school eligible for free or reduced-price lunches						
Less than 20	1.0	0.5	0.7	0.8	0.3	0.5
20 to 49	1.2	0.7	0.7	0.5	0.4	0.5
50 or more	1.5	--	0.5	1.5	0.3	0.6

Table 7a--Standard errors of the percentage of various types of public school kindergarten classes, mean class size, and mean hours classes meet, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Type of class				Mean class size	Mean number of hours class meets per week
	Regular kindergarten	Transitional kindergarten	Transitional 1st grade	Multi-grade/ungraded		
Percentage minority enrollment in class						
Less than 10 .....	1.8	0.6	0.6	1.5	0.5	0.5
10 to 49 .....	1.0	0.4	0.7	0.5	0.5	0.5
50 or more.....	1.1	0.6	0.6	0.8	0.6	0.6
Years teaching kindergarten						
Less than 5 .....	2.0	0.5	0.8	1.7	0.4	0.5
5 to 10 .....	1.2	0.7	0.6	0.7	0.3	0.4
11 or more.....	0.7	—	0.4	0.5	0.3	0.5
Teaching assignment						
Full-day class .....	1.3	0.2	0.8	1.2	0.3	0.2
Two half-day classes .....	0.7	0.6	—	—	0.3	0.1
One half-day class .....	2.3	0.6	—	2.3	0.6	0.2
Major in early childhood education						
Yes .....	0.6	0.3	0.3	0.6	0.2	0.4
No.....	1.3	0.5	0.7	0.9	0.3	0.4
Member of early childhood education professional association						
Yes .....	1.2	0.6	0.5	0.7	0.3	0.4
No.....	1.0	0.4	0.4	0.9	0.3	0.3
Number of early childhood education courses						
Less than 5 .....	1.8	0.4	0.7	1.6	0.3	0.5
5 to 9 .....	1.2	0.5	0.7	0.9	0.4	0.5
10 or more.....	0.8	0.6	0.4	0.6	0.3	0.5
Race/ethnicity						
White, non-Hispanic.....	0.9	0.4	0.4	0.7	0.2	0.3
Black, non-Hispanic.....	2.0	—	1.0	2.1	0.6	1.0
All other races .....	2.9	—	1.5	2.0	0.8	1.3

— Estimate of standard errors is not derived because it is based on a statistic estimated at less than 0.5 or at 100 percent.

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 8.--Percentage of public school kindergarten classes with adult paid assistants, mean number of adult paid assistants in classes with paid assistants, mean number of hours spent in the class, and student-to-staff ratio, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Percentage of classes with adult paid assistants	Mean number of adult paid assistants in classes with paid assistants	Mean number of hours per week each paid assistant spends in class	Student-to-staff ratio
All public school kindergarten classes.....	61	1.2	13.5	15:1
School enrollment size				
Less than 500 .....	58	1.3	13.0	15:1
500 to 749 .....	61	1.2	13.3	16:1
750 or more.....	68	1.3	15.1	16:1
School kindergarten enrollment				
Less than 60 .....	64	1.3	12.8	14:1
60 to 99 .....	58	1.2	12.9	16:1
100 or more.....	61	1.2	14.6	16:1
Kindergarten class size				
Less than 20 .....	54	1.2	12.2	12:1
20 to 25 .....	57	1.2	14.1	16:1
26 or more.....	77	1.4	12.0	18:1
Metropolitan status				
City.....	59	1.2	15.3	16:1
Urban fringe .....	57	1.3	11.0	17:1
Town.....	66	1.2	13.3	14:1
Rural.....	65	1.3	14.3	13:1
Region				
Northeast.....	54	1.2	15.5	15:1
Central.....	49	1.3	10.6	16:1
Southeast.....	77	1.1	19.2	14:1
West.....	61	1.3	10.3	16:1
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	55	1.2	9.8	16:1
20 to 49 .....	57	1.2	13.6	15:1
50 or more.....	70	1.3	15.6	15:1
Percentage minority enrollment in class				
Less than 10 .....	55	1.2	11.2	15:1
10 to 49 .....	60	1.2	12.9	16:1
50 or more.....	71	1.3	16.6	15:1

Table 8.-Percentage of public school kindergarten classes with adult paid assistants, mean number of adult paid assistants in classes with paid assistants, and student-to-staff ratio, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Percentage of classes with adult paid assistants	Mean number of adult paid assistants in classes with paid assistants	Mean number of hours per week each paid assistant spends in class	Student-to-staff ratio
Years teaching kindergarten				
Less than 5 .....	61	1.2	13.7	13:1
5 to 10 .....	61	1.2	13.7	15:1
11 or more .....	61	1.3	13.2	16:1
Teaching assignment				
Full-day class .....	65	1.2	18.8	15:1
Two half-day classes .....	55	1.2	9.2	15:1
One half-day class .....	66	1.4	8.9	16:1
Major in early childhood education				
Yes .....	63	1.2	15.2	15:1
No .....	58	1.3	11.4	16:1
Member of early childhood education professional association				
Yes .....	64	1.3	14.0	15:1
No .....	60	1.2	13.3	15:1
Number of early childhood education courses				
Less than 5 .....	58	1.3	12.0	15:1
5 to 9 .....	63	1.2	12.2	15:1
10 or more .....	63	1.3	15.8	15:1
Race/ethnicity				
White, non-Hispanic .....	59	1.3	12.7	15:1
Black, non-Hispanic .....	75	1.1	20.3	14:1
All other races .....	76	1.3	15.2	14:1

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 8a.—Standard errors of the percentage of public school kindergarten classes with adult paid assistants, mean number of adult paid assistants in classes with paid assistants, mean number of hours spent in the class, and student-to-staff ratios, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Percentage of classes with adult paid assistants	Mean number of adult paid assistants in classes with paid assistants	Mean number of hours per week each paid assistant spends in class	Student-to-staff ratio
All public school kindergarten classes	1.7	0.03	0.4	0.2
School enrollment size				
Less than 500	2.3	0.04	0.6	0.3
500 to 749	3.0	0.04	0.6	0.4
750 or more	4.2	0.04	1.0	0.3
School kindergarten enrollment				
Less than 60	3.5	0.06	0.7	0.3
60 to 99	3.1	0.05	0.8	0.4
100 or more	2.9	0.03	0.6	0.3
Kindergarten class size				
Less than 20	3.0	0.05	0.9	0.3
20 to 25	2.6	0.03	0.6	0.3
26 or more	2.2	0.05	0.6	0.5
Metropolitan status				
City	2.7	0.05	0.9	0.4
Urban fringe	3.6	0.07	0.7	0.5
Town	3.5	0.04	0.7	0.4
Rural	3.6	0.06	0.9	0.4
Region				
Northeast	3.8	0.05	0.9	0.5
Central	3.7	0.09	0.8	0.5
Southeast	2.8	0.03	0.7	0.4
West	2.6	0.05	0.5	0.3
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20	3.0	0.05	0.5	0.3
20 to 49	2.6	0.04	0.7	0.4
50 or more	2.9	0.03	0.8	0.3
Percentage minority enrollment in class				
Less than 10	2.8	0.05	0.6	0.4
10 to 49	2.4	0.05	0.7	0.3
50 or more	2.9	0.04	0.8	0.4

Table 8a.—Standard errors of the percentage of public school kindergarten classes with adult paid assistants, mean number of adult paid assistants in classes with paid assistants, mean number of hours spent in the class, and student-to-staff ratios, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Percentage of classes with adult paid assistants	Mean number of adult paid assistants in classes with paid assistants	Mean number of hours per week each paid assistant spends in class	Student-to-staff ratio
Years teaching kindergarten				
Less than 5.....	3.1	0.04	0.8	0.4
5 to 10.....	3.1	0.04	0.6	0.3
11 or more.....	3.0	0.05	0.6	0.4
Teaching assignment				
Full-day class.....	2.4	0.04	0.6	0.3
Two half-day classes.....	2.8	0.04	0.3	0.4
One half-day class.....	3.3	0.06	0.5	0.4
Major in early childhood education				
Yes.....	2.2	0.03	0.5	0.3
No.....	2.8	0.04	0.5	0.3
Member of early childhood education professional association				
Yes.....	1.8	0.04	0.5	0.3
No.....	2.2	0.04	0.5	0.3
Number of early childhood education courses				
Less than 5.....	3.2	0.04	0.6	0.3
5 to 9.....	2.2	0.04	0.7	0.3
10 or more.....	2.4	0.04	0.7	0.4
Race/ethnicity				
White, non-Hispanic.....	1.7	0.03	0.5	0.2
Black, non-Hispanic.....	4.4	0.05	1.8	0.6
All other races.....	4.4	0.07	1.4	0.6

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 9.-Percentage of public school kindergarten classes with adult volunteer assistants, mean number of adult volunteer assistants in classes with adult volunteers, mean number of hours spent in the class, and student-to-adult ratio, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Percentage of classes with adult volunteer assistants	Mean number of adult volunteer assistants in classes with volunteers	Mean number of hours per week each volunteer spends in class	Student-to-adult ratio
All public school kindergarten classes.....	49	2.7	2.8	14:1
School enrollment				
Less than 500 .....	47	2.8	2.7	13:1
500 to 749 .....	53	2.7	2.7	14:1
750 or more.....	45	2.4	3.5	15:1
School kindergarten enrollment				
Less than 60 .....	47	3.0	2.6	12:1
60 to 99 .....	49	2.8	3.0	14:1
100 or more.....	50	2.4	2.8	15:1
Kindergarten class size				
Less than 20 .....	41	2.3	2.3	11:1
20 to 25 .....	50	2.4	2.7	14:1
26 or more.....	46	3.6	3.4	15:1
Metropolitan status				
City.....	40	2.3	3.8	14:1
Urban fringe .....	60	3.3	2.4	14:1
Town .....	52	2.4	2.3	13:1
Rural .....	45	2.4	2.8	12:1
Region				
Northeast.....	46	2.4	2.9	14:1
Central.....	50	2.4	2.6	14:1
Southeast.....	43	2.1	2.6	13:1
West .....	55	3.3	3.0	13:1
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	65	3.4	2.3	13:1
20 to 49 .....	54	2.5	2.6	14:1
50 or more.....	31	1.9	3.8	14:1
Percentage minority enrollment in class				
Less than 10 .....	55	2.8	2.4	13:1
10 to 49 .....	54	2.9	2.6	14:1
50 or more.....	34	1.9	4.1	14:1

Table 9.--Percentage of public school kindergarten classes with adult volunteer assistants, mean number of adult volunteer assistants in classes with adult volunteers, mean number of hours spent in the class, and student-to-adult ratio, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Percentage of classes with adult volunteer assistants	Mean number of adult volunteer assistants in classes with volunteers	Mean number of hours per week each volunteer spends in class	Student-to-adult ratio
Years teaching kindergarten				
Less than 5 .....	50	2.4	3.2	13:1
5 to 10 .....	50	2.8	2.6	13:1
11 or more.....	47	2.8	2.7	14:1
Teaching assignment				
Full-day class .....	41	2.3	3.4	14:1
Two half-day classes .....	52	2.7	2.3	13:1
One half-day class.....	65	3.4	2.9	13:1
Major in early childhood education				
Yes .....	49	2.6	2.8	13:1
No.....	49	2.8	2.8	14:1
Member of early childhood education professional association				
Yes .....	54	3.0	3.1	13:1
No.....	47	2.5	2.7	14:1
Number of early childhood education courses				
Less than 5 .....	45	2.6	2.7	14:1
5 to 9 .....	48	2.7	3.4	13:1
10 or more.....	53	2.7	2.6	13:1
Race/ethnicity				
White, non-Hispanic.....	50	2.8	2.5	14:1
Black, non-Hispanic.....	39	1.6	5.4	13:1
All other races.....	41	2.4	5.0	13:1

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 9a.-Standard errors of the percentage of public school kindergarten classes with adult volunteer assistants, mean number of adult volunteer assistants in classes with adult volunteers, mean number of hours spent in the class, and student-to-adult ratio, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Percentage of classes with adult volunteer assistants	Mean number of adult volunteer assistants in classes with volunteers	Mean number of hours per week each volunteer spends in class	Student-to-adult ratio
All public school kindergarten classes	1.4	0.1	0.1	0.2
School enrollment				
Less than 500	2.4	0.2	0.2	0.3
500 to 749	2.4	0.2	0.2	0.3
750 or more	3.7	0.2	0.3	0.3
School kindergarten enrollment				
Less than 60	3.6	0.3	0.3	0.4
60 to 99	2.7	0.2	0.3	0.3
100 or more	2.0	0.1	0.2	0.3
Kindergarten class size				
Less than 20	2.8	0.2	0.2	0.3
20 to 25	2.3	0.1	0.2	0.2
26 or more	3.3	0.3	0.3	0.4
Metropolitan status				
City	2.5	0.2	0.4	0.4
Urban fringe	2.4	0.3	0.2	0.4
Town	3.1	0.2	0.2	0.3
Rural	3.7	0.2	0.3	0.4
Region				
Northeast	3.4	0.2	0.3	0.5
Central	4.1	0.2	0.2	0.5
Southeast	2.9	0.1	0.2	0.3
West	2.7	0.2	0.3	0.3
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20	2.5	0.3	0.2	0.3
20 to 49	2.6	0.2	0.2	0.3
50 or more	2.9	0.1	0.4	0.3
Percentage minority enrollment in class				
Less than 10	2.6	0.1	0.2	0.3
10 to 49	2.0	0.2	0.2	0.3
50 or more	2.7	0.2	0.4	0.4

Table 9a.--Standard errors of the percentage of public school kindergarten classes with adult volunteer assistants in classes with adult volunteers, mean number of hours spent in the class, and student-to-adult ratio, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Percentage of classes with adult volunteer assistants	Mean number of adult volunteer assistants in classes with volunteers	Mean number of hours per week each volunteer spends in class	Student-to-adult ratio
<b>Years teaching kindergarten</b>				
Less than 5	2.7	0.2	0.3	0.3
5 to 10	2.0	0.1	0.2	0.3
11 or more	2.6	0.2	0.3	0.3
<b>Teaching assignment</b>				
Full-day class	1.7	0.1	0.3	0.3
Two half-day classes	2.7	0.2	0.2	0.3
One half-day class	3.6	0.3	0.3	0.4
<b>Major in early childhood education</b>				
Yes	1.7	0.1	0.2	0.3
No	2.4	0.2	0.2	0.2
<b>Member of early childhood education professional association</b>				
Yes	3.1	0.2	0.3	0.3
No	1.5	0.1	0.1	0.2
<b>Number of early childhood education courses</b>				
Less than 5	2.2	0.1	0.2	0.3
5 to 9	3.1	0.2	0.4	0.4
10 or more	2.0	0.2	0.1	0.3
<b>Race/ethnicity</b>				
White, non-Hispanic	1.5	0.1	0.1	0.2
Black, non-Hispanic	4.7	0.2	1.2	0.6
All other races	5.4	0.3	1.0	0.5

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 10.--Percentage of public school kindergarten classes in which each child has his or her own desk and the classroom has activity centers, and percentage of time spent in formal instruction and small group activities, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Each child has own desk	Classroom has activity centers	Percentage of time spent in formal group instruction led by the teacher	Percentage of time spent in individual or small group activities
All public school kindergarten classes.....	19	97	31	30
School enrollment size				
Less than 500 .....	19	95	31	30
500 to 749 .....	16	97	31	30
750 or more.....	23	97	31	29
School kindergarten enrollment				
Less than 60 .....	17	95	31	29
60 to 99 .....	16	97	31	29
100 or more.....	23	97	31	31
Kindergarten class size				
Less than 20 .....	23	96	31	28
20 to 25 .....	17	96	31	30
26 or more.....	17	98	31	32
Metropolitan status				
City.....	20	96	31	30
Urban fringe.....	14	98	33	30
Town.....	19	97	32	31
Rural.....	24	95	28	28
Region				
Northeast.....	18	96	33	28
Central.....	16	94	33	30
Southeast.....	22	98	29	29
West.....	19	98	31	32
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	15	98	32	31
20 to 49 .....	20	95	31	30
50 or more.....	20	97	31	29
Percentage minority enrollment in class				
Less than 10 .....	20	96	32	30
10 to 49 .....	16	97	28	32
50 or more.....	21	97	32	27

Table 10.--Percentage of public school kindergarten classes in which each child has his or her own desk and the classroom has activity centers, and percentage of time spent in formal instruction and small group activities, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Each child has own desk	Classroom has activity centers	Percentage of time spent in formal group instruction led by the teacher	Percentage of time spent in individual or small group activities
<b>Years teaching kindergarten</b>				
Less than 5 .....	20	95	30	31
5 to 10 .....	19	97	32	31
11 or more.....	17	97	31	28
<b>Teaching assignment</b>				
Full-day class.....	27	97	29	28
Two half-day classes .....	13	96	37	32
One half-day class.....	14	96	31	32
<b>Major in early childhood education</b>				
Yes .....	17	98	31	29
No.....	21	95	31	30
<b>Member of early childhood education professional association</b>				
Yes .....	15	98	30	32
No.....	21	96	31	29
<b>Number of early childhood education courses</b>				
Less than 5 .....	20	96	32	29
5 to 9 .....	22	96	32	30
10 or more.....	16	98	30	30
<b>Race/ethnicity</b>				
White, non-Hispanic.....	18	96	31	30
Black, non-Hispanic.....	23	98	32	27
All other races.....	27	96	30	32

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 10a.--Standard errors of the percentage of public school kindergarten classes in which each child has his or her own desk and the classroom has activity centers, and percentage of time spent in formal instruction and small group activities, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Each child has own desk	Classroom has activity centers	Percentage of time spent in formal group instruction led by the teacher	Percentage of time spent in individual or small group activities
All public school kindergarten classes.....	1.2	0.7	0.7	0.5
School enrollment size				
Less than 500 .....	1.8	1.0	0.9	0.8
500 to 749 .....	1.3	1.0	0.9	0.9
750 or more.....	3.9	1.1	1.3	1.3
School kindergarten enrollment				
Less than 60 .....	2.3	1.4	1.2	1.2
60 to 99 .....	1.9	0.8	1.1	0.9
100 or more.....	1.9	1.1	0.8	0.8
Kindergarten class size				
Less than 20 .....	2.3	1.0	1.1	0.9
20 to 25 .....	1.3	1.0	0.9	0.9
26 or more.....	2.1	0.9	1.2	1.4
Metropolitan status				
City.....	2.2	1.0	0.8	1.0
Urban fringe.....	1.9	0.8	1.2	1.2
Town.....	2.2	1.2	1.0	1.3
Rural.....	3.6	1.5	1.3	1.3
Region				
Northeast.....	2.3	1.6	1.5	1.4
Central.....	2.5	1.4	1.4	1.4
Southeast.....	2.3	0.8	1.3	0.8
West .....	2.5	1.1	1.0	1.1
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	2.1	0.9	1.1	1.1
20 to 49 .....	1.7	1.4	0.7	1.1
50 or more.....	2.0	0.8	1.1	0.8
Percentage minority enrollment in class				
Less than 10 .....	2.0	1.3	1.0	1.0
10 to 49 .....	2.1	1.0	1.2	1.0
50 or more.....	2.8	0.9	1.0	1.1

Table 10a.--Standard errors of the percentage of public school kindergarten classes in which each child has his or her own desk and the classroom has activity centers, and percentage of time spent in formal instruction and small group activities, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Each child has own desk	Classroom has activity centers	Percentage of time spent in formal group instruction led by the teacher	Percentage of time spent in individual or small group activities
Years teaching kindergarten				
Less than 5 .....	2.0	1.1	1.0	0.6
5 to 10 .....	2.0	1.1	0.9	1.0
11 or more .....	2.2	0.9	1.1	0.9
Teaching assignment				
Full-day class .....	1.8	0.7	0.9	0.8
Two half-day classes .....	1.7	1.2	1.0	1.0
One half-day class .....	2.7	1.2	1.3	1.4
Major in early childhood education				
Yes .....	1.3	0.7	0.9	0.6
No .....	1.3	1.1	0.8	0.9
Member of early childhood education professional association				
Yes .....	2.2	0.7	1.1	0.8
No .....	1.3	0.9	0.7	0.6
Number of early childhood education courses				
Less than 5 .....	2.2	1.0	0.9	1.0
5 to 9 .....	2.5	1.7	1.0	1.1
10 or more .....	1.7	0.6	1.0	0.7
Race/ethnicity				
White, non-Hispanic .....	1.2	0.8	0.8	0.6
Black, non-Hispanic .....	4.5	1.4	2.0	1.9
All other races .....	5.0	1.8	1.7	2.3

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 11.--Percentage of public school kindergarten classes in which a typical child engages in various activities per week: United States, 1993

Activity	Frequency with which a typical child engages in activity			
	Never	1-2 days a week	3-4 days a week	5 days a week
Running, climbing, jumping, and other gross motor activities.....	1	18	23	58
Free play.....	2	10	22	66
Choosing from a set of specific options (like building blocks, manipulatives, or books).....		8	22	69
Using manipulatives for math or science .....	1	12	38	49
Using worksheets for math or science .....	1	46	20	14
Using worksheets for literacy skills .....	20	39	23	18
Listening to stories read aloud .....	0	1	9	90
Dramatic play, arts and crafts, music (creative activities) .	*	7	28	64

\*Less than 0.5 percent.

NOTE: Percentages may not add to 100 because of rounding.

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 11a.--Standard errors of the percentage of public school kindergarten classes in which a typical child engages in various activities per week: United States, 1993

Activity	Frequency with which a typical child engages in activity			
	Never	1-2 days a week	3-4 days a week	5 days a week
Running, climbing, jumping, and other gross motor activities.....	0.5	1.0	1.2	1.4
Free play.....	0.4	1.0	1.2	1.4
Choosing from a set of specific options (like building blocks, manipulatives, or books).....	0.4	0.7	1.3	1.4
Using manipulatives for math or science.....	0.2	1.0	1.6	1.6
Using worksheets for math or science.....	1.5	1.9	1.6	1.0
Using worksheets for literacy skills.....	1.3	1.5	1.4	1.4
Listening to stories read aloud.....	—	0.3	0.9	0.9
Dramatic play, arts and crafts, music (creative activities).....	—	1.0	1.7	1.2

— Estimate of standard error is not derived because it is based on a statistic estimated at less than 0.5 percent or at 100 percent.

SOURCE: Fast Response Survey System. Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 12.-Percentage of public school kindergarten classes in which a typical child engages in various activities 5 days a week, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Running, climbing, jumping, and other gross motor activities	Free play	Choosing from a set of specific options (like building blocks, manipulatives, or books)	Using manipulatives for math or science
All public school kindergarten classes.....	58	66	69	49
School enrollment size				
Less than 500 .....	53	67	68	49
500 to 749 .....	60	68	74	50
750 or more.....	69	61	64	50
School kindergarten enrollment				
Less than 60 .....	56	64	68	43
60 to 99 .....	52	68	67	49
100 or more.....	65	67	72	54
Kindergarten class size				
Less than 20 .....	55	64	69	48
20 to 25 .....	57	67	71	51
26 or more.....	64	67	65	48
Metropolitan status				
City.....	56	63	66	54
Urban fringe .....	54	65	72	46
Town.....	61	70	73	47
Rural.....	65	70	66	49
Region				
Northeast.....	37	64	71	43
Central.....	40	58	63	41
Southeast.....	73	72	75	62
West .....	74	71	69	50
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	50	66	70	42
20 to 49 .....	60	66	71	48
50 or more.....	63	67	68	57
Percentage minority enrollment in class				
Less than 10 .....	49	60	67	42
10 to 49 .....	67	74	73	51
50 or more.....	59	66	67	57

Table 12.--Percentage of public school kindergarten classes in which a typical child engages in various activities 5 days a week, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Running, climbing, jumping, and other gross motor activities	Free play	Choosing from a set of specific options (like building blocks, manipulatives, or books)	Using manipulatives for math or science
Years teaching kindergarten				
Less than 5	54	62	67	48
5 to 10	60	69	70	50
11 or more	60	68	70	50
Teaching assignment				
Full-day class	72	72	72	61
Two half-day classes	41	59	67	38
One half-day class	68	70	69	47
Major in early childhood education				
Yes	60	67	72	53
No	56	66	66	45
Member of early childhood education professional association				
Yes	63	69	72	55
No	56	65	68	47
Number of early childhood education courses				
Less than 5	52	62	63	44
5 to 9	59	69	73	46
10 or more	63	69	73	57
Race/ethnicity				
White, non-Hispanic	56	66	70	47
Black, non-Hispanic	70	64	66	67
All other races	68	67	62	61

Table 12.--Percentage of public school kindergarten classes in which a typical child engages in various activities 5 days a week, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Using worksheets for math or science	Using worksheets for literacy skills	Listening to stories read aloud	Dramatic play, arts and crafts, music (creative activities)
All public school kindergarten classes.....	14	18	90	64
School enrollment size				
Less than 500 .....	12	17	90	63
500 to 749 .....	15	20	90	67
750 or more.....	19	19	93	65
School kindergarten enrollment				
Less than 60 .....	12	17	89	62
60 to 99 .....	15	18	89	64
100 or more.....	15	19	92	67
Kindergarten class size				
Less than 20 .....	17	21	87	62
20 to 25 .....	12	18	92	65
26 or more.....	15	17	91	66
Metropolitan status				
City.....	17	20	91	62
Urban fringe .....	11	16	90	70
Town.....	16	19	92	66
Rural.....	13	18	87	58
Region				
Northeast.....	13	15	91	61
Central.....	8	15	87	58
Southeast.....	23	25	94	69
West.....	13	18	89	68
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	11	15	91	68
20 to 49 .....	11	16	88	65
50 or more.....	20	24	92	62
Percentage minority enrollment in class				
Less than 10 .....	12	15	88	60
10 to 49 .....	12	17	92	70
50 or more.....	20	24	91	63

Table 12--Percentage of public school kindergarten classes in which a typical child engages in various activities 5 days a week, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Using worksheets for math or science	Using worksheets for literacy skills	Listening to stories read aloud	Dramatic play, arts and crafts, music (creative activities)
Years teaching kindergarten				
Less than 5 .....	14	16	90	56
5 to 10 .....	13	20	89	68
11 or more .....	15	19	92	69
Teaching assignment				
Full-day class .....	20	25	91	66
Two half-day classes .....	9	13	89	62
One half-day class .....	11	14	91	66
Major in early childhood education				
Yes .....	16	19	91	68
No .....	12	18	89	60
Member of early childhood education professional association				
Yes .....	11	15	92	70
No .....	15	20	90	62
Number of early childhood education courses				
Less than 5 .....	16	19	85	57
5 to 9 .....	11	18	93	70
10 or more .....	15	18	93	68
Race/ethnicity				
White, non-Hispanic .....	12	17	90	65
Black, non-Hispanic .....	29	25	91	63
All other races .....	23	25	90	62

NOTE: About 3 percent of all kindergarten classes meet less than 5 days a week and so cannot provide these activities 5 days a week.

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 12a.--Standard errors of the percentage of public school kindergarten classes in which a typical child engages in various activities 5 days a week, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Running, climbing, jumping, and other gross motor activities	Free play	Choosing from a set of specific options (like building blocks, manipulatives, or books)	Using manipulatives for math or science
All public school kindergarten classes.....	1.4	1.4	1.4	1.6
School enrollment size				
Less than 500 .....	2.2	2.0	2.1	2.6
500 to 749 .....	2.9	2.2	1.9	3.2
750 or more.....	3.5	3.7	3.6	4.3
School kindergarten enrollment				
Less than 60 .....	3.3	3.2	2.7	3.2
60 to 99 .....	2.2	2.5	2.8	3.0
100 or more.....	2.1	2.0	2.4	2.6
Kindergarten class size				
Less than 20 .....	2.9	2.7	2.3	3.6
20 to 25 .....	2.4	2.3	1.8	2.1
26 or more.....	3.7	2.8	3.0	3.4
Metropolitan status				
City.....	2.4	3.0	2.7	3.3
Urban fringe.....	2.9	2.7	2.1	3.8
Town.....	2.7	3.3	2.8	3.4
Rural.....	3.4	3.6	3.8	3.0
Region				
Northeast.....	2.8	3.9	3.8	3.3
Central.....	3.9	3.2	3.0	3.7
Southeast.....	2.1	1.9	2.3	2.8
West.....	2.4	2.0	2.6	3.2
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	2.4	2.8	2.8	3.5
20 to 49 .....	2.9	2.0	2.1	3.1
50 or more.....	2.5	2.6	2.3	3.1
Percentage minority enrollment in class				
Less than 10 .....	2.2	2.0	2.3	2.3
10 to 49 .....	2.5	2.2	2.5	2.6
50 or more.....	2.7	3.2	2.4	3.1

Table 12a.-Standard errors of the percentage of public school kindergarten classes in which a typical child engages in various activities 5 days a week, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Running, climbing, jumping, and other gross motor activities	Free play	Choosing from a set of specific options (like building blocks, manipulatives, or books)	Using manipulatives for math or science
Years teaching kindergarten				
Less than 5 .....	2.9	2.5	2.4	2.7
5 to 10 .....	2.3	2.7	2.8	2.6
11 or more .....	2.5	2.4	2.3	3.0
Teaching assignment				
Full-day class .....	2.1	1.8	1.7	2.3
Two half-day classes .....	2.7	2.6	2.3	2.6
One half-day class .....	3.2	2.7	3.5	3.3
Major in early childhood education				
Yes .....	1.9	1.8	1.8	2.1
No .....	1.9	2.1	2.3	2.5
Member of early childhood education professional association				
Yes .....	2.7	2.7	1.9	2.9
No .....	1.6	2.1	1.8	1.8
Number of early childhood education courses				
Less than 5 .....	2.0	3.0	2.6	2.2
5 to 9 .....	3.2	3.2	2.8	3.6
10 or more .....	2.0	1.7	2.2	2.3
Race/ethnicity				
White, non-Hispanic .....	1.4	1.5	1.4	1.5
Black, non-Hispanic .....	5.6	4.9	5.8	6.1
All other races .....	7.7	5.3	4.4	4.7

Table 12a.-Standard errors of the percentage of public school kindergarten classes in which a typical child engages in various activities 5 days a week, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Using worksheets for math or science	Using worksheets for literacy skills	Listening to stories read aloud	Dramatic play, arts and crafts, music (creative activities)
All public school kindergarten classes.....	1.0	1.4	0.9	1.2
School enrollment size				
Less than 500 .....	1.2	1.9	1.3	2.1
500 to 749 .....	1.7	2.0	1.8	2.4
750 or more.....	2.9	2.9	1.8	3.2
School kindergarten enrollment				
Less than 60 .....	1.7	2.3	1.6	2.9
60 to 95 .....	1.5	2.0	1.6	2.3
100 or more.....	1.7	2.0	1.5	2.8
Kindergarten class size				
Less than 20 .....	2.1	2.4	1.8	2.4
20 to 25 .....	1.7	1.9	1.2	2.0
26 or more.....	2.0	2.5	1.6	2.8
Metropolitan status				
City.....	2.0	2.1	1.7	2.7
Urban fringe .....	1.7	2.6	1.8	2.7
Town .....	2.2	2.5	1.4	3.1
Rural.....	2.2	2.7	2.4	3.2
Region				
Northeast.....	1.8	2.3	2.2	3.3
Central.....	2.2	3.3	2.9	2.8
Southeast.....	2.6	2.4	1.4	3.0
West.....	1.6	1.8	1.8	2.6
Percentage of students in school eligible for free or reduced-price lunches				
Less than 20 .....	2.2	2.6	1.3	2.6
20 to 49 .....	1.8	2.1	1.9	2.0
50 or more.....	2.1	2.6	1.2	2.3
Percentage minority enrollment in class				
Less than 10 .....	2.2	2.4	1.7	2.2
10 to 49 .....	1.4	2.1	1.5	2.1
50 or more.....	2.1	2.9	1.6	2.7

Table 12a--Standard errors of the percentage of public school kindergarten classes in which a typical child engages in various activities 5 days a week, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Using worksheets for math or science	Using worksheets for literacy skills	Listening to stories read aloud	Dramatic play, arts and crafts, music (creative activities)
Years teaching kindergarten				
Less than 5 .....	2.1	1.9	1.6	2.8
5 to 10 .....	1.7	2.3	1.2	2.8
11 or more .....	1.7	2.0	1.6	2.1
Teaching assignment				
Full-day class .....	1.6	2.2	1.3	1.9
Two half-day classes .....	1.5	2.1	1.5	1.7
One half-day class .....	3.2	2.9	2.3	3.2
Major in early childhood education				
Yes .....	1.2	1.4	1.2	1.7
No .....	1.5	1.8	1.5	2.2
Member of early childhood education professional association				
Yes .....	2.0	1.8	1.5	2.7
No .....	1.3	1.7	1.1	1.6
Number of early childhood education courses				
Less than 5 .....	1.7	2.4	2.2	2.5
5 to 9 .....	1.8	2.5	1.9	2.8
10 or more .....	1.2	1.4	1.3	2.6
Race/ethnicity				
White, non-Hispanic .....	1.1	1.5	1.0	1.3
Black, non-Hispanic .....	5.7	5.9	3.1	5.5
All other races .....	4.2	5.2	3.2	4.9

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 13.-Percentage of public school kindergarten teachers who teach full- and half-day classes, and racial/ethnic and sex distribution of public school kindergarten teachers, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Teaching full-day class	Teaching half-day classes			Race/ethnicity			Sex	
		Morning only	Morning and afternoon	Afternoon only	White, non-Hispanic	Black, non-Hispanic	All other races	Female	Male
All public school kindergarten teachers.....	54	27	62	11	85	8	7	98	2
School enrollment size.....									
Less than 500.....	53	27	67	6	90	5	5	99	1
500 to 749.....	53	24	64	12	85	8	7	99	1
750 or more.....	57	39	35	26	73	12	15	96	4
School kindergarten enrollment.....									
Less than 60.....	52	30	63	7	89	6	5	98	2
60 to 99.....	49	29	61	10	84	9	7	99	1
100 or more.....	59	27	57	17	83	8	9	98	2
Kindergarten class size.....									
Less than 20.....	58	23	69	8	85	8	7	99	1
20 to 25.....	57	20	73	6	86	8	6	98	2
26 or more.....	45	45	32	23	83	7	9	98	2
Metropolitan status.....									
City.....	59	30	59	11	75	14	11	97	3
Urban fringe.....	39	27	59	14	87	4	9	99	1
Town.....	53	22	68	9	90	6	3	99	1
Rural.....	66	37	52	12	93	3	4	98	2
Region.....									
Northeast.....	43	21	74	6	89	7	4	99	1
Central.....	33	16	77	7	93	4	3	98	2
Southeast.....	89	24	63	13	83	14	3	99	1
West.....	41	41	40	8	79	4	17	97	3
Percentage of students in school eligible for free or reduced-price lunches.....									
Less than 20.....	29	26	9	65	95	2	3	98	2
20 to 49.....	56	25	10	65	93	3	5	99	1
50 or more.....	67	35	17	47	72	15	13	98	3

Table 13.--Percentage of public school kindergarten teachers who teach full- and half-day classes, and racial/ethnic and sex distribution of public school kindergarten teachers, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Teaching full-day class	Teaching half-day classes			Race/ethnicity			Sex	
		Morning only	Morning and afternoon	Afternoon only	White, non-Hispanic	Black, non-Hispanic	All other races	Female	Male
Percentage minority enrollment in class									
Less than 10 .....	43	23	67	10	97	1	2	99	1
10 to 49 .....	53	32	58	10	92	5	3	98	2
50 or more .....	67	34	47	19	63	18	19	98	2
Years teaching kindergarten									
Less than 5 .....	53	31	54	15	84	8	9	98	2
5 to 10 .....	55	29	59	12	86	6	8	99	1
11 or more .....	54	25	67	8	85	9	6	98	2
Teaching assignment									
Full-day class .....	100	0	0	0	79	12	9	99	1
Two half-day classes .....	0	0	100	0	93	3	4	99	1
One half-day class .....	0	71	0	29	90	2	8	96	4
Major in early childhood education									
Yes .....	61	24	69	8	84	11	6	99	1
No .....	46	32	52	15	86	4	10	98	2
Member of early childhood education professional association									
Yes .....	53	25	62	14	84	8	8	99	1
No .....	54	30	59	11	85	7	7	98	2
Number of early childhood education courses									
Less than 5 .....	50	31	54	15	85	6	9	98	2
5 to 9 .....	50	22	70	8	87	6	7	99	1
10 or more .....	60	30	60	10	84	10	6	98	2
Race/ethnicity									
White, non-Hispanic .....	50	27	61	12	100	0	0	98	2
Black, non-Hispanic .....	83	24	70	6	0	100	0	98	2
All other races .....	65	47	41	12	0	0	100	97	3

NOTE: Percentages may not add to 100 because of rounding.

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 13a.--Standard errors of the percentage of public school kindergarten teachers who teach full- and half-day classes, and racial/ethnic and sex distribution of public school kindergarten teachers, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Teaching full-day class	Teaching half-day classes			Race/ethnicity			Sex	
		Morning only	Morning and afternoon	Afternoon only	White, non-Hispanic	Black, non-Hispanic	All other races	Female	Male
All public school kindergarten teachers	1.6	1.9	2.1	1.3	1.2	1.0	0.7	0.4	0.4
School enrollment size									
Less than 500	2.5	3.6	6.4	2.8	1.6	1.3	0.9	0.4	0.4
500 to 749	3.2	3.7	2.9	5.9	2.1	1.8	1.2	0.5	0.5
750 or more	3.6	3.4	1.9	7.3	2.6	2.4	1.9	1.3	1.3
School kindergarten enrollment									
Less than 60	3.5	2.9	2.4	5.4	2.5	2.4	1.4	0.8	0.8
60 to 99	3.0	4.6	3.0	7.8	1.9	1.6	1.2	0.4	0.4
100 or more	2.7	4.3	3.0	7.0	1.9	1.3	1.2	0.7	0.7
Kindergarten class size									
Less than 20	3.5	3.2	2.6	6.1	2.1	1.8	1.7	0.5	0.5
20 to 25	1.8	3.3	2.2	6.9	1.5	1.1	1.3	0.6	0.6
26 or more	3.2	4.0	2.4	6.9	2.9	2.1	2.0	0.7	0.7
Metropolitan status									
City	2.7	3.3	1.8	5.0	3.0	2.2	1.7	0.8	0.8
Urban fringe	2.2	4.6	2.2	6.6	1.7	0.9	1.5	0.5	0.5
Town	3.5	3.4	2.2	4.7	1.6	1.5	1.2	0.6	0.6
Rural	3.9	2.9	1.3	4.7	1.6	0.9	1.5	0.8	0.8
Region									
Northeast	3.8	3.0	1.9	3.9	2.0	2.1	1.4	0.7	0.7
Central	3.6	2.5	1.9	5.0	2.5	1.6	1.6	0.9	0.9
Southeast	2.0	2.2	1.3	4.5	2.4	2.3	0.8	0.4	0.4
West	3.4	3.1	2.2	6.8	2.1	1.0	2.0	0.9	0.9
Percentage of students in school eligible for free or reduced-price lunches									
Less than 20	3.3	3.8	3.2	7.5	1.5	0.8	1.3	0.8	0.8
20 to 49	2.7	3.6	3.3	7.0	1.2	0.6	1.2	0.4	0.4
50 or more	2.7	3.7	2.6	6.9	2.5	2.3	1.6	0.8	0.8

Table 13a.--Standard errors of the percentage of public school kindergarten teachers who teach full- and half-day classes, and racial/ethnic and sex distribution of public school kindergarten teachers, by teacher and school characteristics: United States, 1993 -- Continued

School and teacher characteristic	Teaching full-day class	Teaching half-day classes			Race/ethnicity			Sex	
		Morning only	Morning and afternoon	Afternoon only	White, non-Hispanic	Black, non-Hispanic	All other races	Female	Male
Percentage minority enrollment in class.....									
Less than 10 .....	2.8	3.6	2.4	5.2	0.9	0.7	0.7	0.6	0.6
10 to 49 .....	2.2	4.1	2.2	4.9	1.3	1.2	0.7	0.6	0.6
50 or more.....	3.0	3.5	1.9	7.1	3.0	2.6	1.8	0.8	0.8
Years teaching kindergarten									
Less than 5 .....	2.9	3.4	3.0	5.9	2.2	1.8	1.6	0.7	0.7
5 to 10 .....	2.4	3.3	2.4	5.9	1.5	1.3	1.1	0.5	0.5
11 or more.....	2.5	3.8	3.0	5.5	2.1	1.8	1.2	0.6	0.6
Teaching assignment.....									
Full-day class .....	—	—	—	—	2.0	1.7	1.1	0.4	0.4
Two half-day classes .....	—	—	—	—	1.1	0.7	0.9	0.6	0.6
One half-day class.....	—	2.9	—	2.9	—	—	—	—	—
Major in early childhood education									
Yes .....	2.2	3.8	2.6	6.2	1.7	1.5	0.8	0.4	0.4
No.....	2.7	3.8	2.6	6.2	1.4	0.9	1.3	0.6	0.6
Member of early childhood education professional association									
Yes .....	2.7	3.2	2.4	5.7	2.0	1.4	1.8	0.6	0.6
No.....	1.7	3.2	2.4	5.7	1.3	1.1	0.8	0.5	0.5
Number of early childhood education courses .....									
Less than 5 .....	2.8	4.7	2.7	6.2	1.5	1.3	1.3	0.5	0.5
5 to 9 .....	2.4	2.9	2.3	5.8	1.9	1.5	1.6	0.7	0.7
10 or more.....	2.6	4.0	2.4	5.0	2.0	1.6	1.0	0.5	0.5
Race/ethnicity									
White, non-Hispanic.....	1.8	2.8	1.4	2.8	—	—	—	0.3	0.3
Black, non-Hispanic.....	3.9	1.2	0.9	1.4	—	—	—	1.4	1.4
All other races.....	4.8	2.3	1.3	2.6	—	—	—	1.9	1.9

— Estimate of standard error is not derived because it is based on a statistic estimated at less than 0.5 percent or at 100 percent.

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 14.--Mean years teaching and teaching kindergarten, mean number of courses completed in early childhood education, and percentage of public school kindergarten teachers with early childhood education majors and professional association membership, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Mean years teaching	Mean years teaching kindergarten	Mean courses completed in early childhood education	Percentage with major in early childhood education	Percentage who are members of professional association for early childhood education
All public school kindergarten teachers....	14	9	9	54	29
School enrollment size					
Less than 500 .....	14	9	8	51	32
500 to 749 .....	14	9	10	58	29
750 or more.....	13	8	9	58	24
School kindergarten enrollment					
Less than 60 .....	14	9	8	50	35
60 to 99 .....	14	9	9	54	25
100 or more.....	13	9	9	57	29
Kindergarten class size					
Less than 20 .....	13	7	8	49	28
20 to 25 .....	13	9	9	62	30
26 or more.....	16	10	9	47	30
Metropolitan status					
City.....	14	9	10	58	27
Urban fringe .....	14	9	9	50	31
Town.....	14	9	8	56	36
Rural.....	13	8	8	53	24
Region					
Northeast.....	15	9	8	53	24
Central.....	14	9	7	41	28
Southeast.....	13	8	11	79	32
West .....	14	8	8	41	31
Percentage of students in school eligible for free or reduced-price lunches					
Less than 20 .....	14	9	9	50	30
20 to 49 .....	14	9	9	55	31
50 or more.....	13	8	9	56	27

Table 14.--Mean years teaching and teaching kindergarten, mean number of courses completed in early childhood education, and percentage of public school kindergarten teachers with early childhood education majors and professional association membership, by school and teacher characteristics: United States, 1993--Continued

School and teacher characteristic	Mean years teaching	Mean years teaching kindergarten	Mean courses completed in early childhood education	Percentage with major in early childhood education	Percentage who are members of professional association for early childhood education
Percentage minority enrollment in class					
Less than 10 .....	14	9	8	51	29
10 to 49 .....	14	9	9	57	33
50 or more .....	13	8	9	54	26
Years teaching kindergarten					
Less than 5 .....	7	2	7	49	23
5 to 10 .....	14	7	9	54	30
11 or more .....	21	17	11	61	36
Teaching assignment					
Full-day class .....	14	9	10	61	53
Two half-day classes .....	14	10	8	27	29
One half-day class .....	14	8	7	12	18
Major in early childhood education					
Yes .....	14	9	12	100	35
No .....	14	8	5	0	65
Member of early childhood education professional association					
Yes .....	15	11	11	65	100
No .....	13	8	8	35	0
Number of early childhood education courses					
Less than 5 .....	12	7	2	24	20
5 to 9 .....	13	8	7	56	30
10 or more .....	15	10	16	82	38
Race/ethnicity					
White, non-Hispanic .....	14	9	9	54	29
Black, non-Hispanic .....	14	9	12	76	32
All other races .....	14	8	8	42	30

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

Table 14a.—Standard errors of the mean years teaching and teaching kindergarten, mean number of courses in early childhood education completed, and percentage of public school kindergarten teachers with early childhood education majors and professional association membership, by school and teacher characteristics: United States, 1993

School and teacher characteristic	Mean years teaching	Mean years teaching kindergarten	Mean courses completed in early childhood education	Percentage with major in early childhood education	Percentage who are members of professional association for early childhood education
All public school kindergarten teachers....	0.2	0.2	0.2	1.3	1.5
School enrollment size					
Less than 500 .....	0.3	0.3	0.3	2.4	2.2
500 to 749 .....	0.5	0.3	0.4	2.6	3.0
750 or more.....	0.4	0.4	0.6	2.8	2.6
School kindergarten enrollment					
Less than 50 .....	0.6	0.5	0.6	2.8	3.5
60 to 99 .....	0.4	0.4	0.5	2.9	2.1
100 or more.....	0.3	0.3	0.4	1.9	2.3
Kindergarten class size					
Less than 20 .....	0.5	0.3	0.5	2.4	2.7
20 to 25 .....	0.3	0.3	0.3	2.1	2.3
26 or more.....	0.5	0.5	0.5	2.4	2.6
Metropolitan status					
City.....	0.5	0.4	0.5	2.1	2.5
Urban fringe.....	0.4	0.4	0.4	2.7	2.8
Town.....	0.4	0.4	0.5	3.0	2.8
Rural.....	0.6	0.4	0.7	3.5	2.9
Region					
Northeast.....	0.6	0.5	0.5	3.0	3.5
Central.....	0.6	0.6	0.3	3.0	3.8
Southeast.....	0.4	0.3	0.6	1.9	2.5
West .....	0.3	0.3	0.4	2.6	2.2
Percentage of students in school eligible for free or reduced-price lunches					
Less than 20 .....	0.4	0.4	0.4	0.4	2.5
20 to 49 .....	0.4	0.3	0.4	0.4	2.7
50 or more.....	0.4	0.4	0.4	0.4	2.1

Table 14a.--Standard errors of the mean years teaching and teaching kindergarten, mean number of courses in early childhood education completed, and percentage of public school kindergarten teachers with early childhood education majors and professional association membership, by school and teacher characteristics: United States, 1993 -- Continued

School and teacher characteristic	Mean years teaching	Mean years teaching kindergarten	Mean courses completed in early childhood education	Percentage with major in early childhood education	Percentage who are members of professional association for early childhood education
Percentage minority enrollment in class					
Less than 10	0.4	0.4	0.5	2.4	2.3
10 to 49	0.3	0.3	0.4	2.4	2.5
50 or more	0.5	0.4	0.6	2.0	2.2
Years teaching kindergarten					
Less than 5	0.3	0.1	0.3	2.2	1.7
5 to 10	0.3	0.1	0.3	2.3	2.3
11 or more	0.3	0.3	0.6	2.0	3.0
Teaching assignment					
Full-day class	0.3	0.2	0.4	1.9	1.9
Two half-day classes	0.5	0.5	0.4	2.6	2.4
One half-day class	0.7	0.6	0.5	3.3	3.2
Major in early childhood education					
Yes	0.4	0.3	0.3	—	2.3
No	0.3	0.3	0.2	—	1.5
Member of early childhood education professional association					
Yes	0.4	0.5	0.4	2.2	—
No	0.3	0.2	0.2	1.7	—
Number of early childhood education courses					
Less than 5	0.3	0.3	0.1	1.9	2.0
5 to 9	0.5	0.4	0.1	2.7	2.6
10 or more	0.4	0.4	0.4	1.6	2.5
Race/ethnicity					
White, non-Hispanic	0.2	0.2	0.2	1.5	1.6
Black, non-Hispanic	1.0	0.9	1.2	4.2	3.9
All other races	0.9	0.8	0.9	5.0	6.1

— Estimate of standard error is not derived because it is based on a statistic estimated at less than 0.5 percent or at 100 percent.

SOURCE: Fast Response Survey System, Kindergarten Teacher Survey on Student Readiness, FRSS 46, U.S. Department of Education, National Center for Education Statistics, 1993.

## **Appendix A: Questionnaire**

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U.S. DEPARTMENT OF EDUCATION  
NATIONAL CENTER FOR EDUCATION STATISTICS  
WASHINGTON, D.C. 20208-5651

FORM APPROVED  
O.M.B. No.: 1850-0676  
EXPIRATION DATE: 12/93

**KINDERGARTEN TEACHER SURVEY  
ON STUDENT READINESS**  
**FAST RESPONSE SURVEY SYSTEM**

This survey is authorized by law (20 U.S.C. 1221e-1). While you are not required to respond, your cooperation is needed to make the results of this survey comprehensive, accurate, and timely.

**DEFINITIONS FOR THIS SURVEY:**

**prekindergarten** - program primarily for 4-year-olds prior to kindergarten

**transitional (or readiness) kindergarten** - extra year of school for kindergarten-age eligible children who are judged not ready for kindergarten

**kindergarten** - traditional year of school primarily for 5-year-olds prior to first grade

**transitional first grade** - extra year of school for children who have attended kindergarten and have been judged not ready for first grade

**class** - refers to the child's total school day, including time spent with any teacher, as well as time spent on meals, naps, recess, and between activities

**activity center** - clearly delineated, organized, thematic work and play area where children interact with materials and other children without the teacher's constant presence or direction (such as a language arts area, a block area, a dramatic play area)

**AFFIX LABEL HERE**

**IF ABOVE INFORMATION IS INCORRECT, PLEASE CORRECT DIRECTLY ON LABEL.**

Name of person completing this form: \_\_\_\_\_ Telephone number: \_\_\_\_\_

Title/position: \_\_\_\_\_

What is the best day/time to reach you at this number, if we have any questions? Day: \_\_\_\_\_ Time: \_\_\_\_\_

**RETURN COMPLETED FORM TO:**

WESTAT, INC.,  
1650 Research Boulevard  
Rockville, Maryland 20850  
ATTN: Heaviside, 928122

**IF YOU HAVE ANY QUESTIONS, CALL:**

Sheila Heaviside  
1-800-937-8281, Ext. 8391

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1.	Do you teach (circle one answer in each row):	Yes	No
a.	A full-day class?.....	1	2
b.	A half-day morning class?.....	1	2
c.	A half-day afternoon class?.....	1	2

If you teach separate a.m. and p.m. classes, answer questions 2-8 with respect to the morning class.

2.	What type of class is this? (See cover page for definitions. Circle one.)				
	Kindergarten class.....	1			
	Transitional (or readiness) kindergarten class.....	2			
	Transitional first grade class .....	3			
	Multigrade or ungraded class with at least some kindergarten-age children (specify).....	4			
3.	a. How many children were enrolled in this class as of October 1? _____				
	b. As of October 1, how many children in this class were: (If none, please enter 0)	c. As of October 1, how many children in this class were: (If none, please enter 0)			
	American Indian or Alaskan Native .....	Four years old or younger.....			
	Asian or Pacific Islander .....	Five years old.....			
	Black, non-Hispanic.....	Six years old.....			
	Hispanic .....	Seven years old or older.....			
	White, non-Hispanic .....				
4.	a. How many days per week does this class meet? _____	b. Hours per week? _____			
	c. How many adult paid assistants or co- or team teachers do you have in this class in a typical week? _____				
	d. On average, how many hours per week does each adult paid assistant or co- or team teacher spend in this class? _____				
	e. How many adult volunteer assistants do you have in this class in a typical week? _____				
	f. On average, how many hours per week does each adult volunteer assistant spend in this class? _____				
5.	a. Does each child have his or her own desk?.....	1	2		
	b. Do you have activity centers (see cover page for definition) in this classroom? .....	1	2		
6.	How often does a typical child in your class engage in each of the following activities in a typical week?	Yes	No		
		Never	1-2 days a week	3-4 days a week	5 days a week
	a. Running, climbing, jumping, and other gross motor activities.....	1	2	3	4
	b. Free play .....	1	2	3	4
	c. Choosing from a set of specified options (like building blocks, manipulatives, or books).....	1	2	3	4
	d. Using manipulatives for math or science .....	1	2	3	4
	e. Using worksheets for math or science.....	1	2	3	4
	f. Using worksheets for literacy skills.....	1	2	3	4
	g. Listening to stories read aloud.....	1	2	3	4
	h. Dramatic play, arts and crafts, music (creative activities) .....	1	2	3	4
7.	On average, how much time each day does your class spend in formal group instruction by the teacher in reading, numbers, or the alphabet? .....	hours	minutes		
8.	On average, how much time each day does your class spend in individual or small group activities planned by the teacher and selected by the children?.....	hours	minutes		
9.	Here is a list of statements that different kindergarten teachers have made regarding their views of readiness. Indicate the extent to which you agree with the following statements.				
	1 = strongly disagree; 2 = disagree; 3 = neither; 4 = agree; 5 = strongly agree.	Strongly disagree		Strongly agree	
	a. Attending preschool is very important for success in kindergarten.....	1	2	3	4
	b. Children who begin formal reading and math instruction in preschool (nursery or prekindergarten) will do better in elementary school .....	1	2	3	4
	c. Parents should make sure that their children know the alphabet before they start kindergarten.....	1	2	3	4
	d. If a child appears to be unready for kindergarten, I would suggest he or she wait a year before enrolling .....	1	2	3	4

		Strongly disagree		Strongly agree
e.	Children with readiness problems should enter school as soon as they are eligible so they can be exposed to the things they need .....	1	2	3 4 5
f.	Readiness comes as children grow and mature; you can't push it .....	1	2	3 4 5
g.	I can enhance children's readiness by providing experiences they need to build important skills .....	1	2	3 4 5
h.	Parents should set aside time every day for their kindergarten children to practice schoolwork .....	1	2	3 4 5
i.	Homework should be given in kindergarten almost every day .....	1	2	3 4 5
j.	I assume that by the end of the kindergarten year all children will be ready for first grade .....	1	2	3 4 5
k.	I hesitate to send children on to first grade if I feel they are not ready for the demands that they will meet there .....	1	2	3 4 5
l.	I communicate with the first grade teachers so they can proceed from where I have left off .....	1	2	3 4 5
m.	Parents should read to their children and play counting games at home regularly .....	1	2	3 4 5
n.	Most children should learn to read in kindergarten .....	1	2	3 4 5
o.	The best way to learn how to read is to practice matching letters and sounds over and over .....	1	2	3 4 5
p.	One of the best ways to help children learn to read is by reading to them .....	1	2	3 4 5
q.	Kindergarten children should not be given reading instruction unless they show an interest .....	1	2	3 4 5

10. In your professional judgment, how important do you believe the following characteristics are for a child to be ready for kindergarten?

1 = not at all important; 2 = not very important; 3 = somewhat important; 4 = very important; 5 = essential.

		Not at all important		Essential
a.	Is physically healthy, rested, well-nourished .....	1	2	3 4 5
b.	Finishes tasks .....	1	2	3 4 5
c.	Can count to 20 or more .....	1	2	3 4 5
d.	Takes turns and shares .....	1	2	3 4 5
e.	Has good problem-solving skills .....	1	2	3 4 5
f.	Is enthusiastic and curious in approaching new activities .....	1	2	3 4 5
g.	Is able to use pencils or paint brushes .....	1	2	3 4 5
h.	Is not disruptive of the class .....	1	2	3 4 5
i.	Knows the English language .....	1	2	3 4 5
j.	Is sensitive to other children's feelings .....	1	2	3 4 5
k.	Sits still and pays attention .....	1	2	3 4 5
l.	Knows the letters of the alphabet .....	1	2	3 4 5
m.	Can follow directions .....	1	2	3 4 5
n.	Identifies primary colors and basic shapes .....	1	2	3 4 5
o.	Communicates needs, wants, and thoughts verbally in child's primary language .....	1	2	3 4 5

11. Using the list in question 10, select the 3 characteristics most important for a child's readiness for kindergarten. (Enter the letter from a to o for your 3 choices.)

Most important  
 Second most important  
 Third most important

12. a. How many years have you been teaching? \_\_\_\_\_  
b. How many years have you been teaching kindergarten? \_\_\_\_\_

13. Did you major in early childhood education in college or graduate school? Yes .... 1 No .... 2

14. How many courses in early childhood education have you completed? \_\_\_\_\_

15. Are you currently a member of a professional association for early childhood education? Yes .... 1 No .... 2

16. What is your sex? Male .... 1 Female .... 2

17. What is your racial/ethnic background?

American Indian or Alaskan Native .....	1	Hispanic .....	4
Asian or Pacific Islander .....	2	White, non-Hispanic .....	5
Black, non-Hispanic .....	3	Other, (specify) .....	6

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